

# Working Paper

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For more information, contact the  
Applied Research Unit at:

Employment Development Department  
Labor Market Information Division  
7000 Franklin Blvd. Ste. 1100  
Sacramento, CA 95823

Phone: (916) 262-2162  
Fax: (916) 262-2342

[www.labormarketinfo.edd.ca.gov](http://www.labormarketinfo.edd.ca.gov)

## **Employment and Earnings of Farm Workers: California and San Joaquin Valley, 1991, 1996, and 2001**

**M. Akhtar Khan  
Philip Martin  
Phil Hardiman**

*The views expressed are those of the  
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Development Department or the State of  
California*

M. Akhtar Khan and Phil Hardiman are Research Program Specialist and Research Manager, respectively, in the Labor Market Information Division of the California Employment Development Department. Philip Martin is Professor of Agricultural and Resource Economics at the University of California, Davis.

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## Summary

The eight counties<sup>1</sup> of the San Joaquin Valley (SJV) had annual farm sales of \$14 billion in 2000, exceeding those of every state except California. The SJV is growing and changing, attracting “home equity” migrants seeking lower cost housing and newcomers to the US seeking seasonal farm jobs.

The purpose of this paper is to compare employment and earnings patterns of SJV farm workers with farm workers elsewhere in California, particularly in Central Coast<sup>2</sup> counties such as Monterey. In this regional analysis we find that:

- Average annual earnings for California workers reported by agricultural employers in 2001 were \$10,200. SJV workers had average earnings 44 percent lower and Central Coast workers had six percent higher average earnings.
- The share of farm workers hired indirectly, that is, brought to farms by farm labor contractors and crop preparation for market services, rose throughout the state in the past decade, but the rise was especially noticeable in the SJV. Between 1991 and 2001, there was a drop of 53,000 jobs reported by crop farmers who hired workers directly, and an increase of 141,000 jobs in agricultural services.
- Statewide, agricultural employers reported approximately 1.7 million unique workers (Social Security Numbers) in 2001, and they held a total of 2.5 million jobs in the state--1.8 million with agricultural employers, and 700,000 or 28 percent with nonfarm employers. The percentage of farm workers with nonfarm employers varies by region-- 29 percent of those reported by farm employers in the Central Coast also had nonfarm jobs, versus 10 percent of those in the SJV. Nonfarm jobs tend to raise the average earnings of farm workers.
- Retention of farm workers is low: only 24 percent of the farm workers (Social Security Numbers) reported by agricultural employers in 1991 were also reported by farm employers in 1996 and 2001, and lower than average in both the SJV and Central Coast. Retention rates were higher for five-year periods-- about 40 percent of the SSNs reported in 1991 were also reported in 1996, and almost 40 percent of those reported in 1996 were also reported in 2001.
- In conclusion, a growing number of individuals (Social Security Numbers) are being reported by farm employers, but relatively few workers are retained in agriculture over five and ten year periods. If there were ways to retain workers in agriculture for longer periods, there would be less need for the entry of new and often unauthorized farm workers to replace those who leave the farm work force each year. Programs that enable seasonal workers to switch employers, commodities, and region and obtain more hours of work could increase the earnings of workers and provide employers with a more stable and experienced work force.

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<sup>1</sup> Fresno, Kern, Kings, Merced, Madera, San Joaquin, Stanislaus, and Tulare

<sup>2</sup> Alameda, Contra Costa, Monterey, San Benito, San Mateo, Santa Clara, and Santa Cruz counties

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## Introduction

California employers who pay \$100 or more in quarterly wages are required to obtain an unemployment insurance (UI) reporting number from the California Employment Development Department (EDD), which assigns each employer or “reporting unit” a 4-digit Standard Industrial Classification (SIC) or, since 2001, a 6-digit North American Industry Classification System (NAICS) code that reflects the employer’s major activity. Major activities are grouped in increasing levels of detail, e.g., agriculture, forestry and fisheries are classified as a major industrial sector and, within this sector, SIC 01 is assigned to crops, 017 to fruits and nuts, and 0172 to grapes.

We defined “farm workers” as the unique Social Security Numbers (SSNs) reported by farm employers to EDD, and examined their jobs and earnings in 1991, 1996, and 2001. The data used in this analysis have strengths and weaknesses for understanding the farm labor market. They should be a near universe of all persons employed for wages by agricultural employers,<sup>3</sup> but we know that some nonfarm employers hire farm workers, as when a winery hires vineyard workers who are included in the administrative data we use as nonfarm winery workers, while some agricultural employers hire nonfarm workers, as when a large farming operation hires clerical staff. Some workers have multiple SSNs, while in other cases several workers are employed under a single SSN. There is no way to know if these over- and under-estimates of the universe of farm workers cancel each other out.

## Jobs and Workers

Agricultural employment can be measured several ways: at a point in time, as an average over time, or by counting the total number of individuals employed over some period of time. In nonseasonal labor markets with little turnover, the three employment concepts yield similar results—if 100 workers are employed during each month and there is no worker turnover from month to month, then point in time, average, and total employment is 100. However, agricultural employment during the six summer months may be 150, versus 50 during the six winter months, and employers may have hired 300 workers to keep the average 100 job slots filled, and so that peak (150), average (100), and total (300) employment counts differ.

Table 1A shows average employment in California and in farming in 1991, 1996, and 2001. Farm employment grew rapidly between 1991 and 1996, up 19 percent versus 4 percent for statewide employment, largely because of a remarkable 47 percent rise in average employment in farm services, including farm labor contractors who bring workers to farms. The sharply higher number of

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<sup>3</sup> We excluded from the analysis SSNs reported by 50 or more employers (there were 602 such SSNs of the total 1,067,948, and they had 59,776 wage records (jobs) reported by agricultural employers in 2001). We also excluded wage records or jobs that had less than \$1 in earnings and jobs that reported earnings of more than \$75,000 in one quarter. These adjustments eliminated from the analysis 2,750 SSNs, 62,571 wage records or jobs, and \$803 million in earnings, about 0.25, 2.7, and 6.1 percent of the totals, respectively.

farm service jobs helped to reduce the average number of workers per “year-round equivalent” farm job from 2.7 to 2.4. However, between 1996 and 2001, average farm employment fell and unique SSNs rose, so that there were 2.8 workers per year round job by 2001.

SJV trends mirror statewide trends, with a 60 percent rise in farm services employment between 1991 and 1996 and a 15 percent reduction between 1996 and 2001. The Central Coast is notable for having more growth in farm production employment, also known as direct hire because the employer hires workers directly rather than indirectly via FLCs. There was also a very high ratio of SSNs to year-round jobs in the Central Coast—almost 4 to 1 by 2001.

Since farm work is seasonal, it is often assumed that workers change employers and migrate in order to maximize their earnings. Workers employed by FLCs and other farm service firms can move from farm to farm and remain employed by one employer, as appears to be the case for many of those in the Central Coast, where 46 percent of workers in 2001 were employed by farm services employers. Figure 1 shows that, in the Central Coast, 76 percent of the SSNs were reported by only one farm employer, versus 60 percent in the SJV and 52 percent statewide.

**Table 1A: California Average Employment and Unique SSNs: 1991, 1996, and 2001**

California	1991	1996	2001	1991-96	1996-01
Payroll Employment	12,701,000	13,151,700	15,084,600	4%	15%
Total Farm	342,000	408,300	388,000	19%	-5%
Farm Production	218,200	225,700	220,100	3%	-2%
Farm Services	123,800	182,600	168,000	47%	-8%
Unique Farm SSNs	907,166	966,593	1,086,563	7%	12%
SSN/Employ Ratio	2.7	2.4	2.8	--	--

**Table 1B: SJV Average Ag Employment and Unique SSNs: 1991, 1996, and 2001**

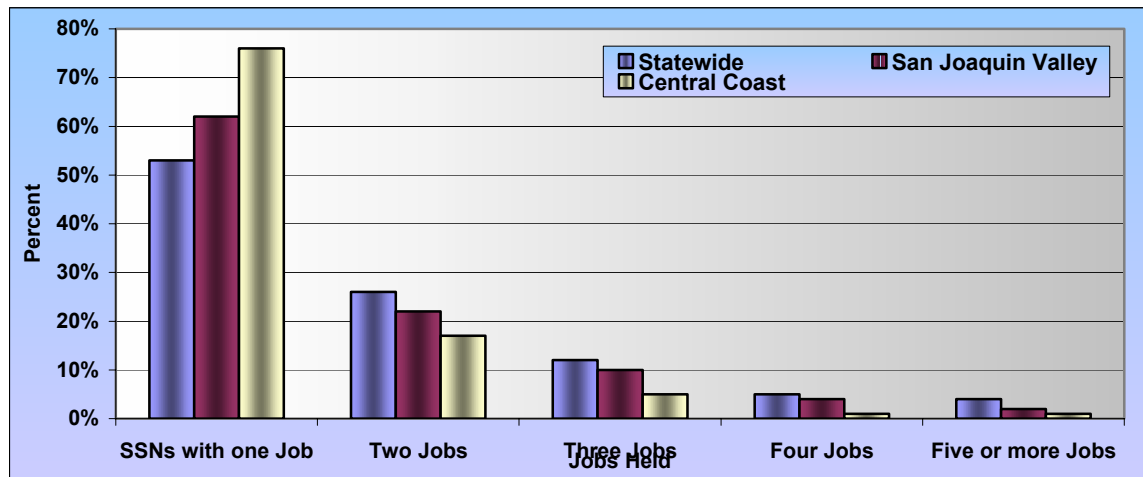
San Joaquin Valley	1991	1996	2001	1991-96	1996-01
Payroll Employment	992,560	1,072,730	1,175,800	8%	10%
Total Farm	152,270	198,510	174,530	30%	-12%
Farm Production	84,800	90,060	82,400	6%	-9%
Farm Services	67,370	108,450	92,030	60%	-15%
Unique SSNs	318,800	342,900	335,200	8%	-2%
SSN/Employ Ratio	2.1	1.7	1.9	--	--

**Table 1C: Central Coast Average Ag Employment and Unique SSNs: 1991, 1996, and 2001**

Central Coast	1991	1996	2001	1991-96	1996-01
Payroll Employment	2,230,350	2,381,960	2,749,290	7%	15%
Total Farm	53,610	57,640	59,380	8%	3%
Farm Production	26,800	30,600	32,100	14%	4%
Farm Services	25,710	26,940	27,280	5%	1%
Unique SSNs	168,611	200,166	230,795	18%	15%
SSN/Employ Ratio	3.1	3.5	3.9	--	--

Source: CES estimates [www.calmis.cahwnet.gov/file/indhist/cal\\$hwxs.xls](http://www.calmis.cahwnet.gov/file/indhist/cal$hwxs.xls) and analysis of wage records by the Labor Market Information Division of EDD

**Figure 1: Number of Jobs Held in 2001**



Source: Analysis of wage records by the Labor Market Information Division of EDD

### Employees, Jobs, and Earnings

The number of workers or unique SSNs reported by agricultural employers rose by a third between 1991 and 2001—there were 1.3 million employees reported in 1991, 1.4 million in 1996, and 1.7 million in 2001, and a declining share of these “farm workers” had most of their earnings in agriculture (We tagged each SSN reported by a California employer with a farm SIC code, compiled all California jobs for that SSN, and considered the worker to be a farm worker if most of the earnings were from employers with farm SIC codes).

**Table 1D Total and Farm Workers (Unique SSNs), 1991, 1996, 2001**

<b>California</b>	<b>1991</b>	<b>1996</b>	<b>2001</b>	<b>1991-96</b>	<b>1991-01</b>
Total Employees by SIC <sup>4</sup>	1,283,646	1,374,858	1,696,309	7%	32%
Farm Workers (unique SSNs)	907,166	966,593	1,086,563	7%	20%
Share	71%	70%	64%		
<b>San Joaquin Valley</b>					
Total Employees by SIC	519,672	533,749	564,249	3%	9%
Farm Workers (unique SSNs)	424,987	452,508	467,716	6%	10%
Share	82%	85%	83%		
<b>Central Coast</b>					
Total Employees by SIC	198,224	239,362	282,562	21%	43%
Farm Workers (unique SSNs)	140,883	171,509	188,053	22%	33%
Share	71%	72%	67%		

Source: Analysis of wage records by the Labor Market Information Division of EDD

In the SJV, the number of unique SSNs reported by agricultural employers rose much slower, while in the Central Coast the number of unique workers surged by 43 percent.

Average agricultural employment based on a separate survey of farm employers, Current Employment Statistics, found much smaller increases in employment, suggesting that more workers are “sharing” fewer year-round equivalent jobs.<sup>5</sup> The alternative explanation, that more workers are using multiple SSNs, should not be the case given the relatively aggressive issuance of letters to employers by the Social Security Administration threatening penalties if employers reported e.g. more than 50 SSNs that did not match SSA records.

Appendix Table 2A shows that the workers reported by California agricultural employers had a total 1.5 million farm jobs in 1991, 1.7 million in 1996, and 1.8 million in 2001. Most of the workers reported by farm employers had only one farm job, and 60 percent of these nonfarm jobs were in services and trade [a quarter of those reported by farm employers were also reported by a nonfarm employer-- 407,000 workers in 1991, 453,000 in 1996, and 697,000 in 2001]. The SJV accounted for half of the state’s farm jobs, and workers reported by SJV farm employers were far less likely to also be reported by nonfarm employers—only an eighth in 1991, 1996, and 2001, and SJV farm workers with nonfarm jobs were slightly less likely to be reported by services and trade employers. In the Central Coast, by contrast, 40 percent of the “farm workers” were also reported

<sup>4</sup> Table 2 provides a listing of all agricultural industries by SIC classification, and the number of jobs reported by employers and the number of individual workers (SSNs) employed in each SIC. The number of jobs and the number of workers differs significantly from SIC to SIC. For example, Vegetable and Melon (SIC 016) employers reported 90,770 workers and 97,702 jobs in 2001, a difference of about eight percent and suggesting that most workers had only one vegetable employer. In contrast, Fruit and Nut (SIC 017) employers reported 251,577 workers and 333,355 jobs, a difference of about 25 percent., suggesting that far more workers had more than one fruit and nut employer

<sup>5</sup> This may, in part, mean that the increased number of individual workers needed to produce the increased tonnage worked outside the pay periods containing the 12<sup>th</sup> of each month in a given quarter. The 12<sup>th</sup> of the month pay period is the period for which employers are asked to report the number of their employees.

by a nonfarm employer, and a higher-than-average share of these nonfarm jobs were in services and trade.

The total California earnings of persons employed in agriculture were \$11.1 billion in 1991, \$12.0 billion in 1996, and \$15.8 billion in 2001 (in 2001 dollars).<sup>6</sup> The share of total earnings from agricultural employers was 77 percent in 1991 and 1996, but fell to 71 percent in 2001, indicating a rising share of total earnings from nonfarm jobs. The SJV accounts for about half of total farm workers and jobs, but only a third of total farm worker earnings and 40 percent of earnings from farm employers, reflecting less nonfarm work and lower farm wages. For example, in 2001, total earnings of SJV farm workers were \$3.8 billion, only 24 percent of the state total, but 87 percent of these earnings were from farm employers. In the Central Coast, by contrast, the share of total earnings from farm employers has been declining—from 78-79 percent of total earnings of workers reported once by farm employers in 1991 and 1996 to 70 percent in 2001.

As shown in Appendix Tables 2A-2C, the average annual earnings of all workers reported at least once by farm employers were \$9,300 in 2001. Annual earnings were highest for workers employed primarily on livestock farms, \$14,800, and were about the same in agricultural services and crop production, \$8,500. SJV farm workers had significantly lower earnings, \$6,800, reflecting lower than average earnings in crops, \$6,100 and farm services, \$4,000. Central Coast farm workers had higher earnings if they were employed directly by crop farmers, \$10,900 than if they were employed by farm services, \$6,200—the number of livestock workers in the Central Coast is very small.

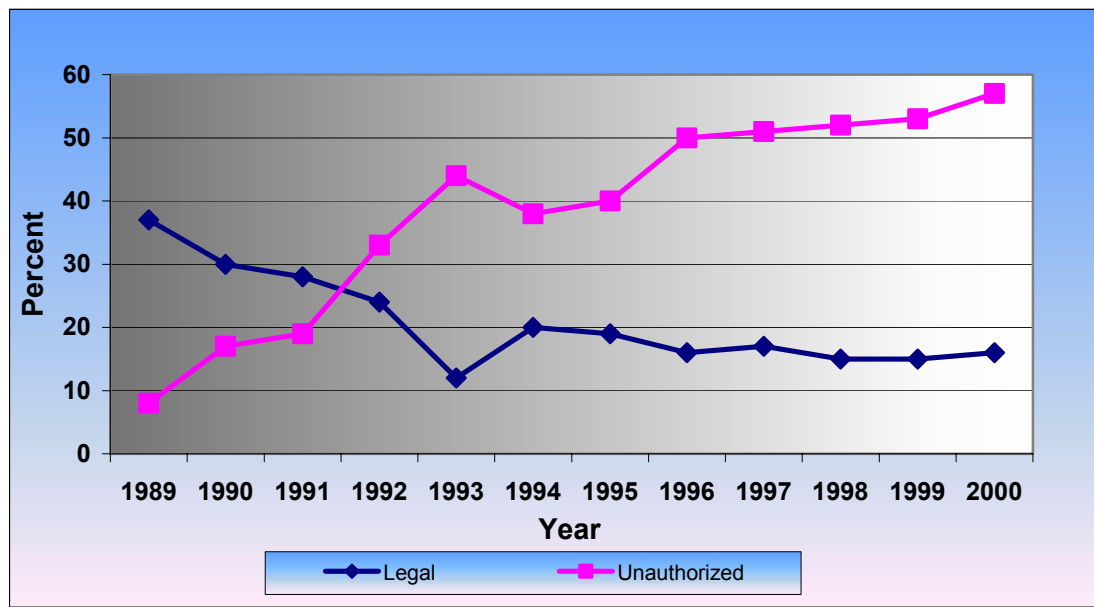
Why are average earnings in the SJV lower than average? Many of the crops grown in the SJV are seasonal, providing shorter periods of employment, and the CES data show that average hourly earnings in the SJV tend to be lower than average. Two other factors contribute to lagging SJV earnings—rising shares of unauthorized foreign workers—over half of US and California farm workers are believed to be unauthorized, and the rising importance of farm services employers, who pay lower than average wages.

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<sup>6</sup> We converted earnings in 1991 and 1996 to 2001 earnings using the Employment Cost Index (ECI) for private industry in the western region, for wages and salaries only. We adjusted earnings using the ECI rather than the Consumer Price Index (CPI) because the ECI measures changes in the price of labor including wages and salaries, while the CPI measures changes in the price of goods and services. Because the ECI specifically measures changes in wages, the Federal Bureau of Labor Statistics (BLS) strongly recommends using the ECI when converting nominal wages to real wages. See BLS Handbook of Methods, April 1997, Chapter 8 (<http://stats.bls.gov/hom/homch8.pdf>).



**Figure 2: Share of Legalized and Unauthorized Farm Workers: 1989-2000**



Source: NAWS, <http://www.dol.gov/asp/programs/agworker/naaws>

### Primary Farm Workers and Jobs

In 2001, the 1.7 million workers reported at least once by farm employers had a total of 2.5 million jobs, including 1.8 million farm jobs and 700,000 nonfarm jobs. The 564,000 workers reported by SJV farm employers had 972,000 jobs, including 866,000 with agricultural employers, 277,000 on crop farms where the farmer hired workers directly, 44,000 in livestock, and 544,000 in agricultural services. In the SJV, farm labor contractors and crop preparation for market services accounted for over 90 percent of the farm services jobs, a much higher than average share. In the central coast, by contrast, FLCs and crop preparation services accounted for only 40 percent of farm services jobs.

Appendix Tables 3A-3C assign farm workers to their “primary” SIC, the category in which they had their highest earnings. In 2001, in the SJV, there were 433,000 primary farm workers, and they included 148,000 reported by crop employers, 35,000 reported by livestock employers, and 250,000 reported by agricultural service employers, which accounted for 49 percent, 70 percent and 50 percent of the statewide primary jobs in these sectors. Vegetables and melons and fruits and nuts employers accounted for 69 percent of the crop-reported workers, dairy for 45 percent of the livestock-reported workers, and FLCs for 71 percent of the agricultural services-reported workers.<sup>7</sup> These data for the SJV reveal significantly higher percentages of farm workers that are primarily employed in these sectors compared to statewide percentages of 47, 40, and 44 percent, respectively.

<sup>7</sup>Agricultural services sector includes both farm and nonfarm agricultural services, such as veterinary services and lawn and garden services. FLCs accounted for 70 percent of the employees reported by farm agricultural services.

In the SJV, the major change between 1991 and 2001 was the increase of 44,000 (25% of the statewide) SSNs or workers reported by agricultural employers—the number of “farm workers” with their primary (highest-earning) job in agriculture rose from 390,000 to more than 433,000. There was a big drop (20,000) in workers reported by crop employers, a slight increase (6,000) in livestock workers, and a sharp 58,000 (43% of the statewide) increase in agricultural services workers, anchored by a 48,000 (81% of the statewide) increase, to 179,000, in workers reported by FLCs in 2001. Central Coast (CC) mimicked the same trends, except that there was an increase of 7,500 SSNs reported by crop employers with their primary jobs in this sector.

Appendix Table 3B shows that, similar to the statewide trends, in the SJV most SSNs were reported by only one agricultural employer: in 2001, 303,000 were reported only once by an agricultural employer; 97,000 were reported by two or more agricultural employers; 19,000 were reported at least once by an agricultural employer and a nonfarm employer; and 14,000 were reported by at least two agricultural and one nonfarm employer. This pattern did not change in the 1990s: about 68 percent of workers were reported by one agricultural employer, 23 to 25 percent by two agricultural employers, about 4 percent by at least 2 agricultural employers and one nonfarm employer, and 4 percent by one farm and one nonfarm employer. However, the percentage of workers reported by one employer in CC is much higher than both in the SJV and the State. For example, in the CC, in 2001 82 percent of workers were reported by one agricultural employer, 11 percent by two agricultural employers, about 1 percent by at least 2 agricultural employers and one nonfarm employer, and 6 percent by one farm and one nonfarm employer.

Appendix Tables 3A, 3B, and 3C also presents the distribution of workers reported by agricultural employers in the state by more detailed SIC categories. For example, in 2001, there were 503,760 SSNs that had most of their annual California earnings with agricultural service employers, and two thirds of these primarily agricultural services workers had jobs only in agricultural services. Patterns of job-holding conform to expectations—almost 80 percent of primarily dairy workers were employed only by employers with dairy SIC codes, while less than 60 percent of those who earned more from grapes than any other commodity were employed only in grapes (remember that 52 percent of workers had only one farm job). Citrus, tree fruits, and vegetables were SICs in which 55 to 65 percent of the workers who had most of their earnings in these commodities worked only in these commodities.

In the SJV, a higher percentage of workers were employed in the commodity in which they had their maximum earnings, e.g. 86 percent of dairy workers and 60 percent or more of most fruit and vegetable workers. Surprisingly, most of those whose primary earnings were with FLCs had jobs only with FLCs—some 74 percent in 2001. The Big 5 SICs that accounted for about 47 percent of the agricultural wages reported-- farm labor contractors, ornamental nursery

products, crop preparation services (custom harvesters), grape employers, and vegetable and melon employers—generally had 70 percent or more of the employees who had their maximum earnings in these commodities employed only in these commodities, meaning that directly hired grape employees did not often become directly hired vegetable employees.<sup>8</sup>

### **Earnings and Estimates of Hours Worked**

Appendix Table 2B and 2C showed that in the SJV and CS regions, agricultural employers (SIC 01, 02, and 07) paid a total of \$3.3 billion and \$2.0 billion (\$11 billion statewide) in wages in 2001, an average \$7,107 and \$10,838 per worker, respectively. When compared to the statewide average (\$10,200), while the SJV workers fared 44 percent lower than the statewide average, the CS workers earned six percent higher than the statewide average. Earnings in the SJV and CS regions are highest for the 40,000 and 4,000 workers primarily employed in livestock in 2001; they averaged \$15,000 and \$13,000, followed by those primarily employed by crop employers, \$6,000 and \$11,000 and by those employed by agricultural farm services, custom harvesters and FLCs, 4,600 and \$9,500 respectively. The statewide average wages for these sectors were \$14,800, \$8,500, and \$5,000.

Tables 4A, 4B, and 4C, show descriptive statistics for selected sectors for California, SJV, and CS. The analysis reveals that there is considerable variation in earnings among workers in agricultural farm services (see Table 4B): workers in SIC 0711, soil preparation services, averaged \$15,900 in 2001, versus \$10,100 for SIC 0723, crop preparation services for market (custom harvesters), and \$2,900 for employees of FLCs. The CS (Table 4C) region mirrors the SJV where workers in SIC 0711, soil preparation services, averaged \$12,700 in 2001, versus \$15,400 for SIC 0723, crop preparation services for market (custom harvesters), and \$4,700 for employees of FLCs.

Tables 4A, 4B, and 4C also show that the average earnings of all farm workers vary significantly, even within detailed 4-digit SIC codes. In most cases, the standard deviation exceeds the mean wage, and median earnings are generally less than mean earnings, reflecting the fact that the mean is pulled up by higher-wage supervisors and farm managers.

In the SJV, if the farm workers in detailed commodities are ranked from lowest-to-highest paid, the lowest 25 percent of earners generally earn less than \$3,000 a year. For example, among workers primarily employed in vegetables and melons in 2001 (SIC 0161), the first quartile or 25<sup>th</sup> percentile annual earnings were \$1,600 in 2001. If these workers earned the state's minimum wage \$6.25 an hour in 2001, they worked 260 hours. The 25<sup>th</sup> percentile was lowest for those employed primarily by FLCs, only \$394, suggesting that workers employed at the minimum wage worked 63 hours. The highest 25<sup>th</sup> percentile mark was in

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<sup>8</sup>The "agriculture" employees and earnings totals include employees and earnings reported by nonfarm agricultural services establishments, veterinary services and lawn and garden services.

beef cattle feedlots followed by mushrooms (food grown under cover), \$3,900 and \$3,600 (\$9,491), reflecting 630 and 574 (1,519) hours, respectively, of work at the minimum wage.

**Table 4A: Statewide Earnings of Primary Employees (\$), 2001**

Industry Title	SIC	Primary Workers	Mean Earnings	Std Dev	Median Earnings	Hours worked 8.02/hr <sup>9</sup>	25th Prcntle Earning	Hours worked 6.25/hr	75th Prcntle Earning	Hours worked 10/hr	Total Earnings (mils)
Cotton	0131	7,409	15,156	15,705	12,243	1,527	3,692	591	21,622	2,162	112
Vegetables and Melons	0161	55,052	11,518	13,721	8,107	1,011	3,036	486	15,226	1,523	634
Berry crops	0171	32,018	7,958	8,756	6,735	840	3,486	558	10,029	1,003	255
Grapes	0172	66,199	8,799	13,287	4,662	581	1,518	243	10,572	1,057	583
Tree nuts	0173	12,453	10,654	13,084	6,278	783	2,160	346	15,274	1,527	133
Citrus fruits	0174	5,367	11,923	13,612	7,597	947	2,665	426	17,480	1,748	64
Deciduous tree fruits	0175	23,220	6,116	8,082	3,960	494	1,530	245	7,633	763	142
Fruits and tree nuts, nec	0179	12,523	9,275	11,237	5,972	745	2,226	356	12,960	1,296	116
Ornamental nursery products	0181	49,635	17,753	19,872	13,357	1,665	5,410	866	21,252	2,125	881
Food crops grown under cover	0182	6,109	22,764	18,227	20,504	2,557	9,491	1,519	29,465	2,947	139
General farms, primarily crop	0191	41,211	9,633	13,176	5,444	679	1,710	274	13,274	1,327	397
Beef cattle feedlots	0211	1,120	17,205	16,281	14,796	1,845	5,678	908	22,985	2,299	19
Dairy farms	0241	20,167	17,767	12,099	18,030	2,248	7,990	1,278	25,150	2,515	358
Soil preparation services	0711	2,630	21,069	23,021	12,886	1,607	5,684	909	29,740	2,974	55
Crop preparation services for market	0723	54,416	12,707	17,608	7,445	928	2,921	467	15,432	1,543	691
Farm labor contractors	0761	225,934	4,385	6,171	2,650	330	634	101	6,172	617	991
Farm management services	0762	15,974	11,991	16,304	6,724	838	2,265	362	16,500	1,650	192
Lawn and garden services	0782	109,402	14,454	15,131	11,264	1,404	4,615	738	18,934	1,893	1,581

Source: Analysis of wage records by the Labor Market Information Division of EDD

In the CS region, as shown in Table 4C, although workers exhibit even more variability in their earnings, workers in this region generally appeared to be employed for significantly more number of hours and earned much higher wages. In this region, the lowest 25 percent of earners range from \$14,000 for citrus fruits to \$460 for FLCs, reflecting 2237 and 73 hours of work at the minimum wage. The 75<sup>th</sup> percentile marks the highest earnings that a non-supervisory worker could normally expect to achieve in a commodity—75 percent of workers reported earned less than this amount, and 25 percent earned more. For the

<sup>9</sup>USDA-NASS reported that annual average earnings of field and livestock workers in 2001 were \$8.02; the state's minimum wage was \$6.25 an hour in 2001

**Table 4B: San Joaquin Valley Earnings of Primary Employees (\$), 2001**

Industry Title	SIC	Primary Workers	Mean Earnings	Std Dev	Median Earnings	Hours Worked \$8.02/hr	25th Prcntle Earning	Hours worked 6.25/hr	75th Prcntle Earning	Hours worked 10/hr	Total Earnings (mils)
Cotton	0131	8,075	13,984	15,359	10,399	1,297	2,888	462	20,503	2,050	113
Vegetables and Melons	0161	13,856	8,857	11,200	5,198	648	1,625	260	13,407	1,341	123
Berry crops	0171	373	3,444	6,280	1,389	173	355	57	3,440	344	1
Grapes	0172	51,613	6,056	9,391	3,223	402	1,035	166	7,608	761	313
Tree nuts	0173	9,095	9,322	12,665	4,856	605	1,740	278	12,615	1,262	85
Citrus fruits	0174	3,002	8,848	11,827	4,705	587	1,594	255	12,340	1,234	27
Deciduous tree fruits	0175	17,492	5,581	7,688	3,682	459	1,463	234	6,970	697	98
Fruits and tree nuts, nec	0179	6,537	8,079	9,878	5,276	658	1,922	308	10,988	1,099	53
Ornamental nursery products	0181	7,432	12,017	15,387	7,599	948	2,588	414	16,434	1,643	89
Food crops grown under cover	0182	316	10,523	9,666	8,383	1,045	3,590	574	15,178	1,518	3
General farms, primarily crop	0191	25,162	8,171	12,364	3,998	499	1,253	200	10,534	1,053	206
Beef cattle feedlots	0211	588	14,756	14,854	12,198	1,521	3,937	630	19,847	1,985	9
Dairy farms	0241	15,687	16,573	11,848	16,599	2,070	6,670	1,067	24,011	2,401	260
Soil preparation services	0711	972	15,891	18,050	10,992	1,371	3,512	562	21,263	2,126	15
Crop preparation services for market	0723	36,797	10,148	13,689	5,972	745	2,294	367	13,318	1,332	373
Farm labor contractors	0761	178,798	2,960	4,303	1,541	192	394	63	4,110	411	529
Farm management services	0762	10,420	7,377	12,731	2,503	312	536	86	8,527	853	77
Lawn and garden services	0782	6,018	10,928	12,279	7,361	918	2,688	430	15,720	1,572	66

Source: Analysis of wage records by the Labor Market Information Division of EDD

**Table 4C: Central Coast Earnings of Primary Employees (\$), 2001**

Industry Title	SIC	Primary Workers	Mean Earnings	Std Dev	Median Earnings	Hours Worked \$8.02/hr	25th Prcntle Earning	Hours worked 6.25/hr	75th Prcntle Earning	Hours worked 10/hr	Total Earnings (mils)
Vegetables and Melons	0161	28,430	11,102	14,176	7,508	936	2,120	339	14,633	1,463	316
Berry crops	0171	16,467	7,910	8,472	7,193	897	3,522	564	10,105	1,011	130
Grapes	0172	1,472	17,107	22,338	9,567	1,193	1,776	284	24,239	2,424	25
Tree nuts	0173	321	11,808	15,524	5,000	623	1,522	244	16,969	1,697	4
Citrus fruits	0174	48	26,021	18,303	22,499	2,805	13,979	2,237	33,417	3,342	1
Deciduous tree fruits	0175	1,170	4,713	7,454	1,820	227	749	120	5,410	541	6
Fruits and tree nuts, nec	0179	1,177	5,174	6,858	3,373	421	1,000	160	6,912	691	6
Ornamental nursery products	0181	16,754	17,785	21,914	11,249	1,403	4,476	716	21,734	2,173	298
Food crops grown under cover	0182	2,725	21,118	15,144	21,237	2,648	10,494	1,679	26,926	2,693	58
General farms, primarily crop	0191	4,136	8,188	10,153	5,441	678	1,645	263	11,216	1,122	34
Beef cattle feedlots	0211	52	9,643	9,954	5,761	718	2,282	365	13,457	1,346	1
Dairy farms	0241	136	19,129	20,538	17,489	2,181	5,653	904	25,295	2,529	3
Soil preparation services	0711	1,222	12,699	19,064	6,316	787	2,560	410	11,907	1,191	16
Crop preparation services for market	0723	11,771	15,387	22,468	8,476	1,057	2,910	466	16,785	1,679	181
Farm labor contractors	0761	42,090	4,712	8,511	2,066	258	458	73	6,555	656	198
Farm management services	0762	1,550	14,870	17,293	10,238	1,277	5,670	907	18,151	1,815	23
Lawn and garden services	0782	20,906	15,715	17,502	11,356	1,416	4,125	660	20,916	2,092	329

Source: Analysis of wage records by the Labor Market Information Division of EDD

SJV region for example, the 75<sup>th</sup> percentile varied widely by commodity: \$4,100 for those primarily employed by FLCs, \$12,300 for those primarily employed in grapes, and \$21,300 for those employed in crop preparation services for market

### Retention in Agricultural Labor Markets

We know that almost three individuals share one year-round equivalent farm job, but how many farm workers return year after year? Using data for 1991, 1996, and 2001, we found only 24 percent of the farm workers (SSNs) reported by agricultural employers in 1991 were also reported in 1996 and 2001, and retention rates were lower in the SJV and Central Coast (Tables 5A-5C).

Retention rates were higher in shorter periods, e.g. about 40 percent of the SSNs reported in 1991 were also reported in 1996, and almost 40 percent of those reported in 1996 were also reported in 2001.

There is significant variation in worker retention rates at the commodity and regional level. For example, in the SJV, retention rates were much higher for workers employed by flower and nursery products establishments than for workers employed by citrus growers. In the Central Coast region, retention rates were higher for vegetables than fruits, suggesting that commodities that offer longer periods of work have higher worker retention rates.

**Table 5A: Statewide and Regional Retention Rates**

	Statewide, All Ag		San Joaquin		Central Coast	
	Matched SSNs	Retention Rate	Matched SSNs	Retention	Matched SSNs	Retention
SSNs in 91-96-01	215,686	24%	91,050	21%	28,091	17%
SSNs in 91-96	363,875	40%	156,812	36%	55,261	33%
SSNs in 91-01	252,462	28%	107,475	25%	33,993	20%
SSNs in 96-01	374,959	39%	167,131	36%	57,421	29%

Source: Analysis of wage records by the Labor Market Information Division of EDD

**Table 5B: San Joaquin Valley and Statewide Commodity Specific Retention Rates**

	Nursery SSNs	SSNs Matched	Retention	Citrus SSNs	SSNs Matched	Retention
<b>Statewide</b>						
SSNs in 91-96-01	56,443	9,203	16%	12,765	1,120	9%
SSNs in 91-96	56,443	17,482	31%	12,765	2,781	22%
SSNs in 91-01	56,443	10,312	18%	12,765	1,311	10%
SSNs in 96-01	61,239	19,091	31%	15,293	2,533	17%
<b>San Joaquin Valley</b>						
SSNs in 91-96-01	9,363	1,371	15%	7,835	411	5%
SSNs in 91-96	9,363	2,607	28%	7,835	1,232	16%
SSNs in 91-01	9,363	1,499	16%	7,835	534	7%
SSNs in 96-01	8,463	2,143	25%	8,177	896	11%

Source: Analysis of wage records by the Labor Market Information Division of EDD

It is often noted that some commodities have complementary harvesting seasons, as when citrus is harvested in the winter and grapes in the summer, so that workers could have a longer period of employment in one area by switching commodities.

**Table 5C: Central Coast and Statewide Commodity Specific Retention Rates**

	All Fruits	SSNs Matched	Retention	VegMelonsSSNs	SSNs Matched	Retention
<b>Statewide</b>						
SSNs in 91-96-01	258,302	35,707	14%	81,883	8,962	11%
SSNs in 91-96	258,302	77,790	30%	81,883	21,227	26%
SSNs in 91-01	258,302	45,986	18%	81,883	11,648	14%
SSNs in 96-01	271,694	72,660	27%	94,267	20,644	22%
<b>Central Coast</b>						
SSNs in 91-96-01	28,860	3,532	12%	26,823	3,908	15%
SSNs in 91-96	28,860	7,652	27%	26,823	8,402	31%
SSNs in 91-01	28,860	4,268	15%	26,823	4,788	18%
SSNs in 96-01	28,230	6,585	23%	33,434	8,400	25%

Source: Analysis of wage records by the Labor Market Information Division of EDD

Some workers employed by FLCs and custom harvesters may do such switching—we do not have commodity specific information for these agricultural service firms—but few directly hired citrus and grape employees are employed in both commodities. For example, in 1991, 1996, and 2001, only 6 to 8 percent of workers were reported by citrus and grape employers were reported by citrus employers in the first quarter and grape employers in the third quarter.

**Table 6: Complementarity in Citrus and Grape Labor Markets in San Joaquin Valley.**

	1991 SSNs	1996 SSNs	2001 SSNs
Worked Citrus in 1st quarter	3,509	3,687	2,363
Worked in Grapes 3rd quarter	57,623	61,238	55,670
Worked In both 1 <sup>st</sup> & 3 <sup>rd</sup> quarters	220	284	163
% of Citrus who worked in Grapes	6.27%	7.70%	6.90%

Source: Analysis of wage records by the Labor Market Information Division of EDD

## **Conclusions**

This paper uses administrative data—data on workers, jobs and earnings reported by employers when they pay UI taxes—to compare employment and earnings patterns in two major farming regions: the SJV, where fruits and nuts are the major employer of farm workers, and the Central Coast, where vegetables are the major employer. A large number of unique individuals (SSNs) are reported by agricultural employers, and most have one farm job in the state and relatively low earnings.

However, there are sharp differences between farm labor markets in the SJV and Central Coast. Workers in the SJV have significantly lower earnings compared to those employed in the Central Coast for several reasons, including their more seasonal work in fruit and nut crops, a higher percentage employed by farm labor contractors, who tend to pay lower wages, and perhaps more unauthorized foreign workers. In the SJV and in other regions, workers reported by livestock and nursery employers have the highest earnings, reflecting less seasonal work.

A growing number of individuals (SSNs) are being reported by farm employers, but relatively few workers are retained in agriculture over five and ten year periods. If there were ways to retain workers in agriculture for longer periods, there would be less need for the entry of new and often unauthorized farm workers to replace those who leave the farm work force each year. Programs that enable seasonal workers to switch employers, commodities, and region and obtain more hours of work could increase the earnings of workers and provide employers with a more stable and experienced work force.



# Appendix

**Table 2A: Statewide Farm Workers and Farm Jobs, 1991, 1996, 2001**

1991					
SIC	Industry Title	Jobs	Employees	Earnings \$ Millions	Average Earnings \$/employee
01, 02, 07	Agriculture	1,540,769	907,166	8,558	9,434
01	Agricultural Production--Crops	684,130	482,511	3,943	8,171
02	Agricultural Production--Livestock	59,428	55,535	893	16,089
07	Agricultural Services	794,948	524,344	3,711	7,078
071, 072, 076	Ag Farm Services	646,215	432,794	1,986	4,590
074, 075, 078	Ag Non-Farm Services	148,733	136,902	1,725	12,600
Sub-Total	All Non-Ag	407,449	376,480	2,585	6,866
50-59 & 70-89	Trade and Services as % of All Non-Ag Jobs	57.8%	56.8%	52.0%	
Grand Total	Ag And Non-Ag	1,948,218	1,283,646	11,143	8,681
1996					
SIC	Industry Title	Jobs	Employees	Earnings \$ Millions	Average Earnings \$/employee
01, 02, 07	Agriculture	1,705,616	966,593	9,236	9,555
01	Agricultural Production--Crops	694,238	498,268	4,026	8,081
02	Agricultural Production--Livestock	54,496	51,368	830	16,151
07	Agricultural Services	953,261	589,032	4,369	7,418
071, 072, 076	Ag Farm Services	786,422	489,633	2,428	4,960
074, 075, 078	Ag Non-Farm Services	166,839	152,422	1,941	12,734
Sub-Total	All Non-Ag	453,000	408,265	2,718	6,657
50-59 & 70-89	Trade and Services as % of All Non-Ag Jobs	60.3%	58.8%	55.5%	
Grand Total	Ag And Non-Ag	2,158,616	1,374,858	11,954	8,695
2001					
SIC	Industry Title	Jobs	Employees	Earnings \$ Millions	Average Earnings \$/employee
01, 02, 07	Agriculture	1,809,503	1,086,563	11,128	10,241
01	Agricultural Production--Crops	630,428	474,195	4,027	8,493
02	Agricultural Production--Livestock	68,575	63,854	945	14,792
07	Agricultural Services	1,107,796	721,655	6,144	8,514
071, 072, 076	Ag Farm Services	817,708	507,231	2,530	4,987
074, 075, 078	Ag Non-Farm Services	290,088	264,366	3,614	13,671
Sub-Total	All Non-Ag	697,334	609,746	4,629	7,592
50-59 & 70-89	Trade and Services as % of All Non-Ag Jobs	59.7%	57.9%	55.0%	
Grand Total	Ag And Non-Ag	2,506,837	1,696,309	15,757	9,289

Source: Analysis of wage records by the Labor Market Information Division of EDD

**Table 2B: San Joaquin Valley: Jobs, Employees, and Wages**

1991				
SIC	Jobs	Employees	Earnings \$ Millions	Average Earnings \$/employee
<b>Agriculture</b>	<b>769,543</b>	<b>424,987</b>	<b>3,089</b>	<b>7,268</b>
Agricultural Production--Crops	330,820	227,590	1,467	6,447
Agricultural Production--Livestock	35,125	33,060	564	17,045
Agricultural Services	403,130	254,260	1,058	4,161
<b>Ag Farm Services</b>	<b>390,846</b>	<b>260,609</b>	<b>924</b>	<b>3,544</b>
<b>Ag Non-Farm Services</b>	<b>12,284</b>	<b>11,689</b>	<b>135</b>	<b>11,515</b>
<b>All Non-Ag</b>	<b>96,730</b>	<b>89,430</b>	<b>455</b>	<b>5,091</b>
Trade and Services as % of All Non-Ag Jobs	54.3%	57.0%	48.1%	
<b>Ag And Non-Ag</b>	<b>866,741</b>	<b>519,672</b>	<b>3,544</b>	<b>6,820</b>
1996				
SIC	Jobs	Employees	Earnings \$ Millions	Average Earnings \$/employee
<b>Agriculture</b>	<b>877,596</b>	<b>452,508</b>	<b>3,293</b>	<b>7,277</b>
Agricultural Production--Crops	333,423	238,147	1,436	6,031
Agricultural Production--Livestock	33,172	31,316	521	16,630
Agricultural Services	508,721	286,448	1,336	4,663
<b>Ag Farm Services</b>	<b>497,023</b>	<b>299,085</b>	<b>1,228</b>	<b>4,105</b>
<b>Ag Non-Farm Services</b>	<b>11,698</b>	<b>11,202</b>	<b>108</b>	<b>9,632</b>
<b>All Non-Ag</b>	<b>88,457</b>	<b>81,241</b>	<b>401</b>	<b>4,940</b>
Trade and Services as % of All Non-Ag Jobs	55.9%	58.5%	51.8%	
<b>Ag And Non-Ag</b>	<b>966,053</b>	<b>533,749</b>	<b>3,694</b>	<b>6,921</b>
2001				
SIC	Jobs	Employees	Earnings \$ Millions	Average Earnings \$/employee
<b>Agriculture</b>	<b>866,011</b>	<b>467,716</b>	<b>3,325</b>	<b>7,108</b>
Agricultural Production--Crops	277,498	209,309	1,283	6,130
Agricultural Production--Livestock	43,902	40,161	601	14,975
Agricultural Services	544,162	313,112	1,440	4,599
<b>Ag Farm Services</b>	<b>530,154</b>	<b>322,126</b>	<b>1,298</b>	<b>4,028</b>
<b>Ag Non-Farm Services</b>	<b>14,008</b>	<b>13,264</b>	<b>142</b>	<b>10,736</b>
<b>All Non-Ag</b>	<b>106,056</b>	<b>96,533</b>	<b>494</b>	<b>5,117</b>
Trade and Services as % of All Non-Ag Jobs	52.2%	55.5%	49.2%	
<b>Ag And Non-Ag</b>	<b>972,067</b>	<b>564,249</b>	<b>3,819</b>	<b>6,767</b>

Source: Analysis of wage records by the Labor Market Information Division of EDD

**Table 2C: Central Coast: Jobs, Employees, and Wages**

1991				
SIC	Jobs	Employees	Earnings \$ Millions	Average Earnings \$/employee
<b>Agriculture</b>	<b>186,350</b>	<b>140,883</b>	<b>1,454</b>	<b>10,320</b>
Agricultural Production--Crops	90,022	76,129	728	9,567
Agricultural Production--Livestock	2,007	1,943	27	13,690
Agricultural Services	94,105	74,433	699	9,391
Ag Farm Services	70,741	58,885	391	6,633
Ag Non-Farm Services	23,364	21,684	308	14,222
<b>All Non-Ag</b>	<b>58,735</b>	<b>53,766</b>	<b>416</b>	<b>7,732</b>
Trade and Services as % of All Non-Ag Jobs	58.8%	62.1%	54.3%	
<b>Ag And Non-Ag</b>	<b>245,298</b>	<b>198,224</b>	<b>1,870</b>	<b>9,432</b>
1996				
SIC	Jobs	Employees	Earnings \$ Millions	Average Earnings \$/employee
<b>Agriculture</b>	<b>219,077</b>	<b>171,509</b>	<b>1,835</b>	<b>10,700</b>
Agricultural Production--Crops	96,633	85,153	831	9,761
Agricultural Production--Livestock	1,833	1,804	25	13,581
Agricultural Services	120,541	97,151	979	10,081
Ag Farm Services	86,291	71,479	498	6,960
Ag Non-Farm Services	34,250	31,887	482	15,113
<b>All Non-Ag</b>	<b>70,692</b>	<b>62,201</b>	<b>496</b>	<b>7,979</b>
Trade and Services as % of All Non-Ag Jobs	63.1%	68.0%	56.6%	
<b>Ag And Non-Ag</b>	<b>289,840</b>	<b>239,362</b>	<b>2,331</b>	<b>9,740</b>
2001				
SIC	Jobs	Employees	Earnings \$ Millions	Average Earnings \$/employee
<b>Agriculture</b>	<b>243,797</b>	<b>188,053</b>	<b>2,038</b>	<b>10,838</b>
Agricultural Production--Crops	95,230	84,580	920	10,878
Agricultural Production--Livestock	4,066	4,046	51	12,580
Agricultural Services	143,299	112,915	1,067	9,451
Ag Farm Services	100,251	80,116	493	6,159
Ag Non-Farm Services	43,048	39,801	574	14,417
<b>All Non-Ag</b>	<b>98,314</b>	<b>83,021</b>	<b>856</b>	<b>10,306</b>
Trade and Services as % of All Non-Ag Jobs	66.7%	74.2%	58.8%	
<b>Ag And Non-Ag</b>	<b>343,313</b>	<b>282,562</b>	<b>2,894</b>	<b>10,241</b>

Source: Analysis of wage records by the Labor Market Information Division of EDD

**Appendix Table 3A: Statewide Primary Jobs Analysis, 1991**

1991											
SIC	Industry Title	Primary or max earnings job in this SIC	Total Earnings in This SIC \$ Million	Only job in this SIC	At least 2 Ag Ers	At least 2 Ag Ers, plus 1 Non-Ag	1 Ag Er, plus 1 Non-Ag Er	Ag Only as % of Prim Jobs	2nd Ag % of Prim	2nd Ag 1 non-ag % of Prim	1 Ag plus 1 non-ag % of prim
01, 02, 07	<b>Agriculture</b>	757,714	7,815	498,287	153,885	36,535	69,007	66%	20%	5%	9%
01	Agricultural Production--Crops	343,060	3,590	219,749	78,175	18,337	26,799	64%	23%	5%	8%
02	Agricultural Production--Livestock	45,225	856	35,394	3,602	954	5,275	78%	8%	2%	12%
07	Agricultural Services	368,547	3,360	242,813	71,748	17,127	36,859	66%	19%	5%	10%
011	Cash Grains	4,545	52	2,981	933	239	392	66%	21%	5%	9%
013	Field Crops, except Cash Grains	18,608	238	11,988	4,434	860	1,326	64%	24%	5%	7%
016	Vegetables and Melons	52,035	594	34,266	12,078	2,339	3,352	66%	23%	4%	6%
017	Fruits and Tree Nuts	162,412	1,320	98,514	41,221	10,393	12,284	61%	25%	6%	8%
018	Horticultural Specialties	49,441	864	38,072	4,123	1,310	5,936	77%	8%	3%	12%
019	General Farms, Primarily Crop	56,019	523	33,928	15,386	3,196	3,509	61%	27%	6%	6%
021	Livestock, Except Dairy And Poultry	8,121	126	6,058	722	181	1,160	75%	9%	2%	14%
024	Dairy Farms	16,177	314	13,366	1,133	286	1,392	83%	7%	2%	9%
025	Poultry and Eggs	16,682	353	12,849	1,326	372	2,135	77%	8%	2%	13%
027	Animal Specialties	2,858	42	2,071	252	71	464	72%	9%	2%	16%
029	General Farms, Primarily Animal	1,387	20	1,050	169	44	124	76%	12%	3%	9%
071, 072, 076	<b>Ag Farm Services</b>	263,720	1,724	162,343	67,779	15,471	18,127	62%	26%	6%	7%
074, 075, 078	<b>Ag Non-Farm Services</b>	104,827	1,636	80,470	3,969	1,656	18,732	77%	4%	2%	18%
0111	Wheat	441	5	267	142	15	17	61%	32%	3%	4%
0112	Rice	2,272	28	1,537	377	138	220	68%	17%	6%	10%
0115	Corn	192	3	107	32	17	36	56%	17%	9%	19%
0116	Soybeans	4	0	4	0	0	0	100%	0%	0%	0%
0119	Cash grains, nec	1,636	16	1,066	382	69	119	65%	23%	4%	7%
0131	Cotton	10,000	147	6,464	2,464	424	648	65%	25%	4%	6%
0133	Sugarcane and sugar beets	447	6	288	84	17	58	64%	19%	4%	13%
0134	Irish potatoes	1,579	13	1,060	301	72	146	67%	19%	5%	9%
0139	Field crops, except cash grains, ne	6,582	73	4,176	1,585	347	474	63%	24%	5%	7%
0161	Vegetables and melons	52,035	594	34,266	12,078	2,339	3,352	66%	23%	4%	6%
0171	Berry crops	34,566	240	23,966	6,321	1,559	2,720	69%	18%	5%	8%
0172	Grapes	62,989	559	36,479	16,913	4,587	5,010	58%	27%	7%	8%
0173	Tree nuts	11,636	107	7,212	2,775	721	928	62%	24%	6%	8%

**Appendix Table 3A: Statewide Primary Jobs Analysis, 1991**

1991											
SIC	Industry Title	Primary or max earnings job in this SIC	Total Earnings in This SIC \$ Million	Only job in this SIC	At least 2 Ag Ers	At least 2 Ag Ers, plus 1 Non-Ag	1 Ag Er, plus 1 Non-Ag Er	Ag Only as % of Prim Jobs	2nd Ag % of Prim	2nd Ag 1 non-ag % of Prim	1 Ag plus 1 non-ag % of prim
0174	Citrus fruits	7,113	89	4,926	1,353	292	542	69%	19%	4%	8%
0175	Deciduous tree fruits	28,441	184	15,445	8,898	2,136	1,962	54%	31%	8%	7%
0179	Fruits and tree nuts, nec	17,667	140	10,486	4,961	1,098	1,122	59%	28%	6%	6%
0181	Ornamental nursery products	41,835	672	31,982	3,784	1,187	4,882	76%	9%	3%	12%
0182	Food crops grown under cover	7,606	192	6,090	339	123	1,054	80%	4%	2%	14%
0191	General farms, primarily crop	56,019	523	33,928	15,386	3,196	3,509	61%	27%	6%	6%
0211	Beef cattle feedlots	1,048	21	845	92	14	97	81%	9%	1%	9%
0212	Beef cattle, except feedlots	5,920	92	4,277	518	144	981	72%	9%	2%	17%
0213	Hogs	270	5	194	48	14	14	72%	18%	5%	5%
0214	Sheep and goats	788	7	674	55	8	51	86%	7%	1%	6%
0219	General livestock, nec	95	1	68	9	1	17	72%	9%	1%	18%
0241	Dairy farms	16,177	314	13,366	1,133	286	1,392	83%	7%	2%	9%
0251	Broiler, fryer, and roaster chicken	7,797	183	5,926	543	175	1,153	76%	7%	2%	15%
0252	Chicken eggs	4,213	77	3,450	211	68	484	82%	5%	2%	11%
0253	Turkeys and turkey eggs	3,865	82	2,895	485	104	381	75%	13%	3%	10%
0254	Poultry hatcheries	447	6	303	61	20	63	68%	14%	4%	14%
0259	Poultry and eggs, nec	360	6	275	26	5	54	76%	7%	1%	15%
0271	Fur-bearing animals and rabbits	46	0	37	3	1	5	80%	7%	2%	11%
0272	Horses and other equines	998	13	741	77	25	155	74%	8%	3%	16%
0273	Animal aquaculture	714	12	457	86	29	142	64%	12%	4%	20%
0279	Animal specialties, nec	1,100	16	836	86	16	162	76%	8%	1%	15%
0291	General farms, primarily animal	1,387	20	1,050	169	44	124	76%	12%	3%	9%
0711	Soil preparation services	1,383	28	1,001	152	51	179	72%	11%	4%	13%
0721	Crop planting and protecting	7,902	115	5,087	1,714	339	762	64%	22%	4%	10%
0722	Crop harvesting	16,709	155	9,179	5,453	974	1,103	55%	33%	6%	7%
0723	Crop preparation services for market	54,603	609	33,197	12,962	2,965	5,479	61%	24%	5%	10%
0724	Cotton ginning	2,248	34	1,179	631	169	269	52%	28%	8%	12%
0741	Veterinary services for livestock	344	9	272	18	3	51	79%	5%	1%	15%
0742	Veterinary services, specialties	19,120	364	15,062	215	109	3,734	79%	1%	1%	20%
0751	Livestock services, exc. veterinary	1,742	48	1,321	86	31	304	76%	5%	2%	17%

**Appendix Table 3A: Statewide Primary Jobs Analysis, 1991**

1991											
SIC	Industry Title	Primary or max earnings job in this SIC	Total Earnings in This SIC \$ Million	Only job in this SIC	At least 2 Ag Ers	At least 2 Ag Ers, plus 1 Non-Ag	1 Ag Er, plus 1 Non-Ag Er	Ag Only as % of Prim Jobs	2nd Ag % of Prim	2nd Ag 1 non-ag % of Prim	1 Ag plus 1 non-ag % of prim
0752	Animal specialty services	7,774	93	5,890	308	116	1,460	76%	4%	1%	19%
0761	Farm labor contractors	166,525	626	104,465	42,483	10,143	9,434	63%	26%	6%	6%
0762	Farm management services	14,350	157	8,235	4,384	830	901	57%	31%	6%	6%
0781	Landscape counseling and planning	7,739	162	5,868	467	174	1,230	76%	6%	2%	16%
0782	Lawn and garden services	61,742	849	47,233	2,641	1,117	10,751	77%	4%	2%	17%
0783	Ornamental shrub and tree services	6,366	111	4,824	234	106	1,202	76%	4%	2%	19%
08 - 09	Forestry & Fishing	882	9	331	360	117	74	38%	41%	13%	8%
10 - 14	Mining	586	12	0	358	228	0	0%	61%	39%	0%
15 - 17	Construction	14,389	186	0	8,611	5,763	15	0%	60%	40%	0%
20 - 39	Manufacturing	37,027	460	0	24,993	12,001	33	0%	67%	32%	0%
40 - 49	Transportation	7,886	155	0	5,203	2,658	25	0%	66%	34%	0%
50 - 59	Trade	44,502	513	0	28,471	15,982	49	0%	64%	36%	0%
60 - 67	FIRE	5,564	123	0	3,579	1,981	4	0%	64%	36%	0%
70 - 89	Services	36,418	525	0	22,559	13,812	47	0%	62%	38%	0%
91 - 98	Public Administration	1,258	36	0	804	452	2	0%	64%	36%	0%
> = 99	All Other SICs	1,822	12	0	1,289	521	12	0%	71%	29%	1%

**Appendix Table 3A: Statewide Primary Jobs Analysis, 1996**

1996											
SIC	Industry Title	Primary or max earnings job in this SIC	Total Earnings in This SIC \$ Million	Only job in this SIC	At least 2 Ag Ers	At least 2 Ag Ers, plus 1 Non-Ag	1 Ag Er, plus 1 Non-Ag Er	Ag Only as % of Prim Jobs	2nd Ag % of Prim	2nd Ag 1 non-ag % of Prim	1 Ag plus 1 non-ag % of prim
01, 02, 07	<b>Agriculture</b>	817,858	8,401	536,078	167,738	38,109	75,933	66%	21%	5%	9%
01	Agricultural Production--Crops	350,700	3,640	225,115	80,606	17,433	27,546	64%	23%	5%	8%
02	Agricultural Production--Livestock	41,999	799	33,691	2,915	907	4,486	80%	7%	2%	11%
07	Agricultural Services	424,031	3,953	276,680	83,828	19,676	43,847	65%	20%	5%	10%
011	Cash Grains	3,978	48	2,564	792	218	404	64%	20%	5%	10%
013	Field Crops, except Cash Grains	19,567	257	13,558	3,959	741	1,309	69%	20%	4%	7%
016	Vegetables and Melons	58,281	643	38,305	14,050	2,443	3,483	66%	24%	4%	6%
017	Fruits and Tree Nuts	168,153	1,339	101,613	43,859	9,974	12,707	60%	26%	6%	8%
018	Horticultural Specialties	51,596	907	38,858	4,619	1,456	6,663	75%	9%	3%	13%
019	General Farms, Primarily Crop	49,125	446	30,217	13,327	2,601	2,980	62%	27%	5%	6%
021	Livestock, Except Dairy And Poultry	7,153	120	5,568	604	186	795	78%	8%	3%	11%
024	Dairy Farms	16,921	315	13,981	1,209	363	1,368	83%	7%	2%	8%
025	Poultry and Eggs	14,688	313	11,736	875	299	1,778	80%	6%	2%	12%
027	Animal Specialties	2,573	40	1,910	154	48	461	74%	6%	2%	18%
029	General Farms, Primarily Animal	664	11	496	73	11	84	75%	11%	2%	13%
071, 072, 076	<b>Ag Farm Services</b>	310,227	2,145	192,415	79,660	17,687	20,465	62%	26%	6%	7%
074, 075, 078	<b>Ag Non-Farm Services</b>	113,804	1,808	84,265	4,168	1,989	23,382	74%	4%	2%	21%
0111	Wheat	244	3	164	59	5	16	67%	24%	2%	7%
0112	Rice	2,425	29	1,573	433	144	275	65%	18%	6%	11%
0115	Corn	162	2	110	23	11	18	68%	14%	7%	11%
0116	Soybeans	2	0	2	0	0	0	100%	0%	0%	0%
0119	Cash grains, nec	1,145	14	715	277	58	95	62%	24%	5%	8%
0131	Cotton	10,957	157	7,610	2,297	402	648	69%	21%	4%	6%
0133	Sugarcane and sugar beets	364	4	213	111	13	27	59%	30%	4%	7%
0134	Irish potatoes	1,746	15	1,245	285	70	146	71%	16%	4%	8%
0139	Field crops, except cash grains, ne	6,500	81	4,490	1,266	256	488	69%	19%	4%	8%
0161	Vegetables and melons	58,281	643	38,305	14,050	2,443	3,483	66%	24%	4%	6%
0171	Berry crops	34,805	242	23,119	6,991	1,725	2,970	66%	20%	5%	9%

**Appendix Table 3A: Statewide Primary Jobs Analysis, 1996**

1996											
SIC	Industry Title	Primary or max earnings job in this SIC	Total Earnings in This SIC \$ Million	Only job in this SIC	At least 2 Ag Ers	At least 2 Ag Ers, plus 1 Non-Ag	1 Ag Er, plus 1 Non-Ag Er	Ag Only as % of Prim Jobs	2nd Ag % of Prim	2nd Ag 1 non-ag % of Prim	1 Ag plus 1 non-ag % of prim
0172	Grapes	64,376	523	37,060	18,463	4,070	4,783	58%	29%	6%	7%
0173	Tree nuts	13,028	135	8,293	2,836	745	1,154	64%	22%	6%	9%
0174	Citrus fruits	7,735	109	5,020	1,779	271	665	65%	23%	4%	9%
0175	Deciduous tree fruits	32,407	201	18,183	9,724	2,360	2,140	56%	30%	7%	7%
0179	Fruits and tree nuts, nec	15,802	129	9,938	4,066	803	995	63%	26%	5%	6%
0181	Ornamental nursery products	44,764	725	33,229	4,372	1,351	5,812	74%	10%	3%	13%
0182	Food crops grown under cover	6,832	182	5,629	247	105	851	82%	4%	2%	12%
0191	General farms, primarily crop	49,125	446	30,217	13,327	2,601	2,980	62%	27%	5%	6%
0211	Beef cattle feedlots	705	13	513	90	16	86	73%	13%	2%	12%
0212	Beef cattle, except feedlots	5,344	94	4,140	436	149	619	77%	8%	3%	12%
0213	Hogs	243	4	182	24	8	29	75%	10%	3%	12%
0214	Sheep and goats	770	7	661	51	9	49	86%	7%	1%	6%
0219	General livestock, nec	91	1	72	3	4	12	79%	3%	4%	13%
0241	Dairy farms	16,921	315	13,981	1,209	363	1,368	83%	7%	2%	8%
0251	Broiler, fryer, and roaster chicken	6,103	138	4,822	399	117	765	79%	7%	2%	13%
0252	Chicken eggs	2,997	55	2,408	158	65	366	80%	5%	2%	12%
0253	Turkeys and turkey eggs	4,786	109	3,926	258	89	513	82%	5%	2%	11%
0254	Poultry hatcheries	225	3	181	20	5	19	80%	9%	2%	8%
0259	Poultry and eggs, nec	577	8	399	40	23	115	69%	7%	4%	20%
0271	Fur-bearing animals and rabbits	47	0	37	3	0	7	79%	6%	0%	15%
0272	Horses and other equines	797	12	606	44	16	131	76%	6%	2%	16%
0273	Animal aquaculture	554	11	402	23	13	116	73%	4%	2%	21%
0279	Animal specialties, nec	1,175	18	865	84	19	207	74%	7%	2%	18%
0291	General farms, primarily animal	664	11	496	73	11	84	75%	11%	2%	13%
0711	Soil preparation services	2,554	47	1,638	449	150	317	64%	18%	6%	12%
0721	Crop planting and protecting	9,025	130	5,997	1,780	387	861	66%	20%	4%	10%
0722	Crop harvesting	17,275	141	9,915	5,462	899	999	57%	32%	5%	6%
0723	Crop preparation services for marke	56,313	718	36,619	11,394	2,675	5,625	65%	20%	5%	10%
0724	Cotton ginning	2,395	39	1,353	654	120	268	56%	27%	5%	11%
0741	Veterinary services for livestock	277	8	217	13	6	41	78%	5%	2%	15%



**Appendix Table 3A: Statewide Primary Jobs Analysis, 1996**

1996											
SIC	Industry Title	Primary or max earnings job in this SIC	Total Earnings in This SIC \$ Million	Only job in this SIC	At least 2 Ag Ers	At least 2 Ag Ers, plus 1 Non-Ag	1 Ag Er, plus 1 Non-Ag Er	Ag Only as % of Prim Jobs	2nd Ag % of Prim	2nd Ag 1 non-ag % of Prim	1 Ag plus 1 non-ag % of prim
0742	Veterinary services, specialties	21,282	408	16,450	352	153	4,327	77%	2%	1%	20%
0751	Livestock services, exc. veterinary	829	14	628	63	32	106	76%	8%	4%	13%
0752	Animal specialty services	6,690	84	4,982	226	128	1,354	74%	3%	2%	20%
0761	Farm labor contractors	207,559	882	128,442	55,407	12,460	11,250	62%	27%	6%	5%
0762	Farm management services	15,106	188	8,451	4,514	996	1,145	56%	30%	7%	8%
0781	Landscape counseling and planning	10,130	238	6,240	651	242	2,997	62%	6%	2%	30%
0782	Lawn and garden services	65,464	889	48,896	2,343	1,259	12,966	75%	4%	2%	20%
0783	Ornamental shrub and tree services	9,132	167	6,852	520	169	1,591	75%	6%	2%	17%
08 - 09	Forestry & Fishing	1,128	8	592	389	93	54	52%	34%	8%	5%
10 - 14	Mining	264	6	0	162	102	0	0%	61%	39%	0%
15 - 17	Construction	13,910	176	0	7,877	6,023	10	0%	57%	43%	0%
20 - 39	Manufacturing	33,504	445	0	20,867	12,594	43	0%	62%	38%	0%
40 - 49	Transportation	8,194	144	0	5,381	2,807	6	0%	66%	34%	0%
50 - 59	Trade	43,226	509	0	26,300	16,890	36	0%	61%	39%	0%
60 - 67	FIRE	4,391	82	0	2,569	1,819	3	0%	59%	41%	0%
70 - 89	Services	42,981	594	0	25,145	17,805	31	0%	59%	41%	0%
91 - 98	Public Administration	1,078	28	0	713	363	2	0%	66%	34%	0%
> = 99	All Other SICs	1,184	7	0	800	384	0	0%	68%	32%	0%

**Appendix Table 3A: Statewide Primary Jobs Analysis, 2001**

2001											
SIC	Industry Title	Primary or max earnings job in this SIC	Total Earnings in This SIC \$ Million	Only job in this SIC	At least 2 Ag Ers	At least 2 Ag Ers, plus 1 Non-Ag	1 Ag Er, plus 1 Non-Ag Er	Ag Only as % of Prim Jobs	2nd Ag % of Prim	2nd Ag 1 non-ag % of Prim	1 Ag plus 1 non-ag % of prim
01, 02, 07	Agriculture	876,782	9,932	572,669	152,946	41,851	109,316	65%	17%	5%	12%
01	Agricultural Production--Crops	322,269	3,594	203,936	70,108	18,029	30,196	63%	22%	6%	9%
02	Agricultural Production--Livestock	49,776	888	36,969	3,793	1,409	7,605	74%	8%	3%	15%
07	Agricultural Services	503,760	5,440	331,492	78,552	22,261	71,455	66%	16%	4%	14%
011	Cash Grains	3,573	46	2,430	545	210	388	68%	15%	6%	11%
013	Field Crops, except Cash Grains	14,909	205	10,222	2,752	712	1,223	69%	18%	5%	8%
016	Vegetables and Melons	55,052	634	34,218	13,458	3,028	4,348	62%	24%	6%	8%
017	Fruits and Tree Nuts	151,780	1,292	91,588	37,784	9,773	12,635	60%	25%	6%	8%
018	Horticultural Specialties	55,744	1,020	40,431	5,089	2,092	8,132	73%	9%	4%	15%
019	General Farms, Primarily Crop	41,211	397	25,047	10,480	2,214	3,470	61%	25%	5%	8%
021	Livestock, Except Dairy And Poultry	9,223	154	6,619	786	265	1,553	72%	9%	3%	17%
024	Dairy Farms	20,167	358	16,012	1,432	557	2,166	79%	7%	3%	11%
025	Poultry and Eggs	16,155	309	11,459	1,173	430	3,093	71%	7%	3%	19%
027	Animal Specialties	3,255	52	2,276	209	106	664	70%	6%	3%	20%
029	General Farms, Primarily Animal	976	14	603	193	51	129	62%	20%	5%	13%
071, 072, 076	Ag Farm Services	320,278	2,182	206,589	71,979	18,635	23,075	65%	22%	6%	7%
074, 075, 078	Ag Non-Farm Services	183,482	3,258	124,903	6,573	3,626	48,380	68%	4%	2%	26%
0111	Wheat	229	3	152	48	15	14	66%	21%	7%	6%
0112	Rice	2,223	29	1,507	334	131	251	68%	15%	6%	11%
0115	Corn	197	2	124	28	10	35	63%	14%	5%	18%
0116	Soybeans	15	0	10	1	1	3	67%	7%	7%	20%
0119	Cash grains, nec	909	12	637	134	53	85	70%	15%	6%	9%
0131	Cotton	7,409	112	5,250	1,298	324	537	71%	18%	4%	7%
0133	Sugarcane and sugar beets	237	3	142	71	14	10	60%	30%	6%	4%
0134	Irish potatoes	1,227	13	835	202	55	135	68%	16%	4%	11%
0139	Field crops, except cash grains, ne	6,036	76	3,995	1,181	319	541	66%	20%	5%	9%
0161	Vegetables and melons	55,052	634	34,218	13,458	3,028	4,348	62%	24%	6%	8%
0171	Berry crops	32,018	255	20,720	6,780	1,781	2,737	65%	21%	6%	9%
0172	Grapes	66,199	583	38,864	17,146	4,530	5,659	59%	26%	7%	9%

**Appendix Table 3A: Statewide Primary Jobs Analysis, 2001**

2001											
SIC	Industry Title	Primary or max earnings job in this SIC	Total Earnings in This SIC \$ Million	Only job in this SIC	At least 2 Ag Ers	At least 2 Ag Ers, plus 1 Non-Ag	1 Ag Er, plus 1 Non-Ag Er	Ag Only as % of Prim Jobs	2nd Ag % of Prim	2nd Ag 1 non-ag % of Prim	1 Ag plus 1 non-ag % of prim
0173	Tree nuts	12,453	133	8,132	2,352	803	1,166	65%	19%	6%	9%
0174	Citrus fruits	5,367	64	3,425	1,289	244	409	64%	24%	5%	8%
0175	Deciduous tree fruits	23,220	142	12,300	7,463	1,803	1,654	53%	32%	8%	7%
0179	Fruits and tree nuts, nec	12,523	116	8,147	2,754	612	1,010	65%	22%	5%	8%
0181	Ornamental nursery products	49,635	881	35,672	4,700	1,948	7,315	72%	9%	4%	15%
0182	Food crops grown under cover	6,109	139	4,759	389	144	817	78%	6%	2%	13%
0191	General farms, primarily crop	41,211	397	25,047	10,480	2,214	3,470	61%	25%	5%	8%
0211	Beef cattle feedlots	1,120	19	805	112	57	146	72%	10%	5%	13%
0212	Beef cattle, except feedlots	5,890	103	4,248	583	159	900	72%	10%	3%	15%
0213	Hogs	187	3	122	33	7	25	65%	18%	4%	13%
0214	Sheep and goats	1,960	28	1,395	52	41	472	71%	3%	2%	24%
0219	General livestock, nec	66	1	49	6	1	10	74%	9%	2%	15%
0241	Dairy farms	20,167	358	16,012	1,432	557	2,166	79%	7%	3%	11%
0251	Broiler, fryer, and roaster chicken	5,877	107	3,534	443	191	1,709	60%	8%	3%	29%
0252	Chicken eggs	2,641	48	1,892	278	80	391	72%	11%	3%	15%
0253	Turkeys and turkey eggs	6,544	140	5,208	379	125	832	80%	6%	2%	13%
0254	Poultry hatcheries	225	3	162	29	3	31	72%	13%	1%	14%
0259	Poultry and eggs, nec	868	11	663	44	31	130	76%	5%	4%	15%
0271	Fur-bearing animals and rabbits	49	1	34	1	2	12	69%	2%	4%	24%
0272	Horses and other equines	1,058	15	753	76	46	183	71%	7%	4%	17%
0273	Animal aquaculture	555	11	391	28	15	121	70%	5%	3%	22%
0279	Animal specialties, nec	1,593	26	1,098	104	43	348	69%	7%	3%	22%
0291	General farms, primarily animal	976	14	603	193	51	129	62%	20%	5%	13%
0711	Soil preparation services	2,630	55	1,842	361	100	327	70%	14%	4%	12%
0721	Crop planting and protecting	9,201	127	5,722	2,053	458	968	62%	22%	5%	11%
0722	Crop harvesting	9,322	98	5,389	2,605	568	760	58%	28%	6%	8%
0723	Crop preparation services for marke	54,416	691	34,169	11,601	2,872	5,774	63%	21%	5%	11%
0724	Cotton ginning	2,801	28	1,661	773	135	232	59%	28%	5%	8%
0741	Veterinary services for livestock	1,442	29	944	143	81	274	65%	10%	6%	19%
0742	Veterinary services, specialties	26,603	534	20,681	430	199	5,293	78%	2%	1%	20%

**Appendix Table 3A: Statewide Primary Jobs Analysis, 2001**

2001											
SIC	Industry Title	Primary or max earnings job in this SIC	Total Earnings in This SIC \$ Million	Only job in this SIC	At least 2 Ag Ers	At least 2 Ag Ers, plus 1 Non-Ag	1 Ag Er, plus 1 Non-Ag Er	Ag Only as % of Prim Jobs	2nd Ag % of Prim	2nd Ag 1 non-ag % of Prim	1 Ag plus 1 non-ag % of prim
0751	Livestock services, exc. veterinary	720	13	552	43	13	112	77%	6%	2%	16%
0752	Animal specialty services	10,404	156	7,482	295	150	2,477	72%	3%	1%	24%
0761	Farm labor contractors	225,934	991	148,468	50,560	13,277	13,629	66%	22%	6%	6%
0762	Farm management services	15,974	192	9,338	4,026	1,225	1,385	58%	25%	8%	9%
0781	Landscape counseling and planning	23,031	734	13,725	1,012	441	7,853	60%	4%	2%	34%
0782	Lawn and garden services	109,402	1,581	73,181	4,086	2,437	29,698	67%	4%	2%	27%
0783	Ornamental shrub and tree services	11,880	212	8,338	564	305	2,673	70%	5%	3%	23%
08 - 09	Forestry & Fishing	977	10	272	493	152	60	28%	50%	16%	6%
10 - 14	Mining	446	10	0	233	213	0	0%	52%	48%	0%
15 - 17	Construction	30,394	463	0	15,295	15,091	8	0%	50%	50%	0%
20 - 39	Manufacturing	38,738	567	0	21,785	16,940	13	0%	56%	44%	0%
40 - 49	Transportation	11,136	211	0	6,672	4,454	10	0%	60%	40%	0%
50 - 59	Trade	55,324	759	0	30,233	25,071	20	0%	55%	45%	0%
60 - 67	FIRE	6,744	150	0	3,727	3,016	1	0%	55%	45%	0%
70 - 89	Services	63,650	1,004	0	34,847	28,782	21	0%	55%	45%	0%
91 - 98	Public Administration	1,382	36	0	902	479	1	0%	65%	35%	0%
> = 99	All Other SICs	1,953	14	0	1,179	774	0	0%	60%	40%	0%

**Appendix Table 3B: San Joaquin Valley Primary Jobs Analysis, 1991**

1991											
SIC	Industry Title	Primary or max earnings job in this SIC	Total Earnings in This SIC \$ Million	Only job in this SIC	At least 2 Ag Ers	At least 2 Ag Ers, plus 1 Non-Ag	1 Ag Er, plus 1 Non-Ag Er	Ag Only as % of Prim Jobs	2nd Ag % of Prim	2nd Ag 1 non-ag % of Prim	1 Ag plus 1 non-ag % of prim
<b>01, 02, 07</b>	<b>Agriculture</b>	389570	2814.6	263120	93351	15540	17559	68%	24%	4%	5%
01	Agricultural Production--Crops	167729	1336.2	105107	47884	7680	7058	63%	29%	5%	4%
02	Agricultural Production--Livestock	28802	548	23724	2801	491	1786	82%	10%	2%	6%
07	Agricultural Services	192860	929.4	134243	42558	7355	8704	70%	22%	4%	5%
011	Cash Grains	1138	11.8	769	289	29	51	68%	25%	3%	4%
013	Field Crops, except Cash Grains	15359	183	10253	3950	493	663	67%	26%	3%	4%
016	Vegetables and Melons	14346	118.4	9755	3482	550	559	68%	24%	4%	4%
017	Fruits and Tree Nuts	93817	668.1	56887	28094	4845	3991	61%	30%	5%	4%
018	Horticultural Specialties	6920	84	4811	1404	265	440	70%	20%	4%	6%
019	General Farms, Primarily Crop	36149	270.9	22632	10665	1498	1354	63%	30%	4%	4%
021	Livestock, Except Dairy And Poultry	3623	54.5	2805	446	99	273	77%	12%	3%	8%
024	Dairy Farms	10832	196.9	9346	916	120	450	86%	8%	1%	4%
025	Poultry and Eggs	12913	277.1	10430	1236	242	1005	81%	10%	2%	8%
027	Animal Specialties	509	6.2	402	69	8	30	79%	14%	2%	6%
029	General Farms, Primarily Animal	925	13.3	741	134	22	28	80%	14%	2%	3%
<b>071, 072, 076</b>	<b>Ag Farm Services</b>	183970	798.9	127330	41731	7181	7728	69%	23%	4%	4%
<b>074, 075, 078</b>	<b>Ag Non-Farm Services</b>	8890	130.5	6913	827	174	976	78%	9%	2%	11%
0111	Wheat	163	1.7	98	59	5	1	60%	36%	3%	1%
0112	Rice	315	4.4	232	59	9	15	74%	19%	3%	5%
0115	Corn	49	0.6	40	5	0	4	82%	10%	0%	8%
0119	Cash grains, nec	611	5.1	399	166	15	31	65%	27%	2%	5%
0131	Cotton	10267	142	7034	2508	270	455	69%	24%	3%	4%
0133	Sugarcane and sugar beets	215	2.2	148	48	10	9	69%	22%	5%	4%
0134	Irish potatoes	595	4.8	407	146	15	27	68%	25%	3%	5%
0139	Field crops, except cash grains, ne	4282	34	2664	1248	198	172	62%	29%	5%	4%
0161	Vegetables and melons	14346	118.4	9755	3482	550	559	68%	24%	4%	4%
0171	Berry crops	273	1.1	220	35	12	6	81%	13%	4%	2%
0172	Grapes	51081	365.9	31797	14495	2635	2154	62%	28%	5%	4%
0173	Tree nuts	8635	69.4	5694	2169	337	435	66%	25%	4%	5%
0174	Citrus fruits	4121	38.5	2690	1064	183	184	65%	26%	4%	4%
0175	Deciduous tree fruits	18154	113.5	9678	6582	1124	770	53%	36%	6%	4%
0179	Fruits and tree nuts, nec	11553	79.7	6808	3749	554	442	59%	32%	5%	4%
0181	Ornamental nursery products	6765	81.6	4733	1345	252	435	70%	20%	4%	6%
0182	Food crops grown under cover	155	2.4	78	59	13	5	50%	38%	8%	3%
0191	General farms, primarily crop	36149	270.9	22632	10665	1498	1354	63%	30%	4%	4%
0211	Beef cattle feedlots	403	8.3	337	31	4	31	84%	8%	1%	8%
0212	Beef cattle, except feedlots	2482	37.4	1826	353	84	219	74%	14%	3%	9%
0213	Hogs	230	4.3	176	39	9	6	77%	17%	4%	3%
0214	Sheep and goats	491	4.4	453	23	2	13	92%	5%	0%	3%
0219	General livestock, nec	17	0.1	13	0	0	4	76%	0%	0%	24%
0241	Dairy farms	10832	196.9	9346	916	120	450	86%	8%	1%	4%
0251	Broiler, fryer, and roaster chicken	8141	184.7	6692	611	131	707	82%	8%	2%	9%
0252	Chicken eggs	1008	17.9	812	104	21	71	81%	10%	2%	7%

**Appendix Table 3B: San Joaquin Valley Primary Jobs Analysis, 1991**

1991											
SIC	Industry Title	Primary or max earnings job in this SIC	Total Earnings in This SIC \$ Million	Only job in this SIC	At least 2 Ag Ers	At least 2 Ag Ers, plus 1 Non-Ag	1 Ag Er, plus 1 Non-Ag Er	Ag Only as % of Prim Jobs	2nd Ag % of Prim	2nd Ag 1 non-ag % of Prim	1 Ag plus 1 non-ag % of prim
0253	Turkeys and turkey eggs	3292	68.9	2573	455	74	190	78%	14%	2%	6%
0254	Poultry hatcheries	357	4.2	260	52	15	30	73%	15%	4%	8%
0259	Poultry and eggs, nec	115	1.4	93	14	1	7	81%	12%	1%	6%
0271	Fur-bearing animals and rabbits	14	0.1	13	1	0	0	93%	7%	0%	0%
0272	Horses and other equines	103	1.2	79	19	1	4	77%	18%	1%	4%
0273	Animal aquaculture	49	0.9	40	3	2	4	82%	6%	4%	8%
0279	Animal specialties, nec	343	4	270	46	5	22	79%	13%	1%	6%
0291	General farms, primarily animal	925	13.3	741	134	22	28	80%	14%	2%	3%
0711	Soil preparation services	803	11.5	590	118	21	74	73%	15%	3%	9%
0721	Crop planting and protecting	4701	61.5	3117	1154	142	288	66%	25%	3%	6%
0722	Crop harvesting	6213	46.9	4274	1361	201	377	69%	22%	3%	6%
0723	Crop preparation services for marke	29860	249.6	18814	7594	1363	2089	63%	25%	5%	7%
0724	Cotton ginning	2227	32.2	1283	623	119	202	58%	28%	5%	9%
0741	Veterinary services for livestock	86	3	76	5	0	5	88%	6%	0%	6%
0742	Veterinary services, specialties	1558	25.1	1341	35	9	173	86%	2%	1%	11%
0751	Livestock services, exc. veterinary	1512	42.8	1290	83	23	116	85%	5%	2%	8%
0752	Animal specialty services	897	7.1	658	124	12	103	73%	14%	1%	11%
0761	Farm labor contractors	131259	327	93290	28466	5049	4454	71%	22%	4%	3%
0762	Farm management services	8907	70.2	5962	2415	286	244	67%	27%	3%	3%
0781	Landscape counseling and planning	468	4.8	320	68	16	64	68%	15%	3%	14%
0782	Lawn and garden services	3873	39.1	2813	480	104	476	73%	12%	3%	12%
0783	Ornamental shrub and tree services	496	8.6	415	32	10	39	84%	6%	2%	8%

**Table 3B: San Joaquin Valley Primary Jobs Analysis, 1996**

1996											
SIC	Industry Title	Primary or max earnings job in this SIC	Total Earnings in This SIC \$ Million	Only job in this SIC	At least 2 Ag Ers	At least 2 Ag Ers, plus 1 Non-Ag	1 Ag Er, plus 1 Non-Ag Er	Ag Only as % of Prim Jobs	2nd Ag % of Prim	2nd Ag 1 non-ag % of Prim	1 Ag plus 1 non-ag % of prim
<b>01, 02, 07</b>	<b>Agriculture</b>	421342	2985.9	282171	107145	15212	16814	67%	25%	4%	4%
01	Agricultural Production--Crops	170419	1295.9	107676	50238	6385	6120	63%	29%	4%	4%
02	Agricultural Production--Livestock	27368	509.4	22968	2442	436	1522	84%	9%	2%	6%
07	Agricultural Services	222947	1179.6	151153	54258	8368	9168	68%	24%	4%	4%
011	Cash Grains	740	7.8	501	185	20	34	68%	25%	3%	5%
013	Field Crops, except Cash Grains	16291	199.1	11476	3685	497	633	70%	23%	3%	4%
016	Vegetables and Melons	16590	115	10818	4718	544	510	65%	28%	3%	3%
017	Fruits and Tree Nuts	99498	654.6	60646	31304	4071	3477	61%	31%	4%	3%
018	Horticultural Specialties	6023	70.7	4195	1272	169	387	70%	21%	3%	6%
019	General Farms, Primarily Crop	31277	248.7	20040	9074	1084	1079	64%	29%	3%	3%
021	Livestock, Except Dairy And Poultry	2943	41.4	2283	383	64	213	78%	13%	2%	7%
024	Dairy Farms	12037	210.9	10304	1120	167	446	86%	9%	1%	4%
025	Poultry and Eggs	11501	243.3	9689	836	189	787	84%	7%	2%	7%
027	Animal Specialties	550	7	425	58	11	56	77%	11%	2%	10%
029	General Farms, Primarily Animal	337	6.8	267	45	5	20	79%	13%	1%	6%
<b>071, 072, 076</b>	<b>Ag Farm Services</b>	214362	1076.2	144390	53444	8183	8345	67%	25%	4%	4%
<b>074, 075, 078</b>	<b>Ag Non-Farm Services</b>	8585	103.4	6763	814	185	823	79%	9%	2%	10%
0111	Wheat	55	0.3	35	17	1	2	64%	31%	2%	4%
0112	Rice	207	2.5	152	42	2	11	73%	20%	1%	5%
0115	Corn	102	1	77	14	4	7	75%	14%	4%	7%
0119	Cash grains, nec	376	4	237	112	13	14	63%	30%	3%	4%
0131	Cotton	11649	156.1	8332	2575	326	416	72%	22%	3%	4%
0133	Sugarcane and sugar beets	153	1.4	93	44	10	6	61%	29%	7%	4%
0134	Irish potatoes	890	8.1	621	175	31	63	70%	20%	3%	7%
0139	Field crops, except cash grains, ne	3599	33.5	2430	891	130	148	68%	25%	4%	4%
0161	Vegetables and melons	16590	115	10818	4718	544	510	65%	28%	3%	3%
0171	Berry crops	636	1.3	452	136	27	21	71%	21%	4%	3%
0172	Grapes	53400	330.6	32616	17020	2108	1656	61%	32%	4%	3%
0173	Tree nuts	9683	87.1	6550	2257	356	520	68%	23%	4%	5%
0174	Citrus fruits	3740	39.5	2356	1121	131	132	63%	30%	4%	4%
0175	Deciduous tree fruits	22105	127.3	12605	7658	1054	788	57%	35%	5%	4%
0179	Fruits and tree nuts, nec	9934	68.8	6067	3112	395	360	61%	31%	4%	4%
0181	Ornamental nursery products	5854	68.7	4057	1251	168	378	69%	21%	3%	6%
0182	Food crops grown under cover	169	2	138	21	1	9	82%	12%	1%	5%
0191	General farms, primarily crop	31277	248.7	20040	9074	1084	1079	64%	29%	3%	3%
0211	Beef cattle feedlots	276	4.5	199	44	4	29	72%	16%	1%	11%
0212	Beef cattle, except feedlots	1988	28.6	1495	280	53	160	75%	14%	3%	8%
0213	Hogs	210	3.8	161	32	4	13	77%	15%	2%	6%
0214	Sheep and goats	453	4.4	415	26	1	11	92%	6%	0%	2%
0219	General livestock, nec	16	0.1	13	1	2	0	81%	6%	13%	0%
0241	Dairy farms	12037	210.9	10304	1120	167	446	86%	9%	1%	4%
0251	Broiler, fryer, and roaster chicken	5717	123.8	4833	408	87	389	85%	7%	2%	7%
0252	Chicken eggs	771	13.7	617	101	16	37	80%	13%	2%	5%

**Table 3B: San Joaquin Valley Primary Jobs Analysis, 1996**

1996											
SIC	Industry Title	Primary or max earnings job in this SIC	Total Earnings in This SIC \$ Million	Only job in this SIC	At least 2 Ag Ers	At least 2 Ag Ers, plus 1 Non-Ag	1 Ag Er, plus 1 Non-Ag Er	Ag Only as % of Prim Jobs	2nd Ag % of Prim	2nd Ag 1 non-ag % of Prim	1 Ag plus 1 non-ag % of prim
0253	Turkeys and turkey eggs	4622	101.9	3936	289	71	326	85%	6%	2%	7%
0254	Poultry hatcheries	128	1.2	104	17	1	6	81%	13%	1%	5%
0259	Poultry and eggs, nec	263	2.7	199	21	14	29	76%	8%	5%	11%
0271	Fur-bearing animals and rabbits	11	0.1	9	0	0	2	82%	0%	0%	18%
0272	Horses and other equines	90	1	69	7	0	14	77%	8%	0%	16%
0273	Animal aquaculture	70	0.9	53	3	1	13	76%	4%	1%	19%
0279	Animal specialties, nec	379	5	294	48	10	27	78%	13%	3%	7%
0291	General farms, primarily animal	337	6.8	267	45	5	20	79%	13%	1%	6%
0711	Soil preparation services	817	13.7	602	111	23	81	74%	14%	3%	10%
0721	Crop planting and protecting	6075	81.5	4120	1453	201	301	68%	24%	3%	5%
0722	Crop harvesting	5506	46.5	3410	1554	226	316	62%	28%	4%	6%
0723	Crop preparation services for marke	32324	333.1	21367	7497	1227	2233	66%	23%	4%	7%
0724	Cotton ginning	2418	37.9	1458	642	94	224	60%	27%	4%	9%
0741	Veterinary services for livestock	109	3.6	97	1	1	10	89%	1%	1%	9%
0742	Veterinary services, specialties	1746	28.9	1537	32	14	163	88%	2%	1%	9%
0751	Livestock services, exc. veterinary	573	9.2	445	58	22	48	78%	10%	4%	8%
0752	Animal specialty services	655	6.7	533	39	15	68	81%	6%	2%	10%
0761	Farm labor contractors	158490	476.3	108454	39102	6040	4894	68%	25%	4%	3%
0762	Farm management services	8732	87.2	4979	3085	372	296	57%	35%	4%	3%
0781	Landscape counseling and planning	352	4.1	256	49	10	37	73%	14%	3%	11%
0782	Lawn and garden services	4176	41.3	3220	420	93	443	77%	10%	2%	11%
0783	Ornamental shrub and tree services	974	9.6	675	215	30	54	69%	22%	3%	6%



**Table 3B: San Joaquin Valley Primary Jobs Analysis, 2001**

2001											
SIC	Industry Title	Primary or max earnings job in this SIC	Total Earnings in This SIC \$ Million	Only job in this SIC	At least 2 Ag Ers	At least 2 Ag Ers, plus 1 Non-Ag	1 Ag Er, plus 1 Non-Ag Er	Ag Only as % of Prim Jobs	2nd Ag % of Prim	2nd Ag 1 non-ag % of Prim	1 Ag plus 1 non-ag % of prim
<b>01, 02, 07</b>	<b>Agriculture</b>	433109	3017.7	302662	97465	14173	18809	70%	23%	3%	4%
01	Agricultural Production--Crops	148026	1158.6	93693	42581	5727	6025	63%	29%	4%	4%
02	Agricultural Production--Livestock	34576	578.7	27661	4064	680	2171	80%	12%	2%	6%
07	Agricultural Services	250433	1280.1	181293	50771	7757	10612	72%	20%	3%	4%
011	Cash Grains	773	8.1	526	170	34	43	68%	22%	4%	6%
013	Field Crops, except Cash Grains	12375	153.9	8894	2574	371	536	72%	21%	3%	4%
016	Vegetables and Melons	13856	122.7	9432	3463	400	561	68%	25%	3%	4%
017	Fruits and Tree Nuts	88112	575.7	53379	27410	3736	3587	61%	31%	4%	4%
018	Horticultural Specialties	7748	92.6	5665	1417	241	425	73%	18%	3%	5%
019	General Farms, Primarily Crop	25162	205.6	15797	7547	945	873	63%	30%	4%	3%
021	Livestock, Except Dairy And Poultry	3941	53.2	2833	658	120	330	72%	17%	3%	8%
024	Dairy Farms	15687	260	13349	1390	247	701	85%	9%	2%	4%
025	Poultry and Eggs	13582	247.3	10479	1777	279	1047	77%	13%	2%	8%
027	Animal Specialties	614	7.1	511	48	8	47	83%	8%	1%	8%
029	General Farms, Primarily Animal	752	11.1	489	191	26	46	65%	25%	3%	6%
<b>071, 072, 076</b>	<b>Ag Farm Services</b>	239542	1143	172479	49975	7568	9520	72%	21%	3%	4%
<b>074, 075, 078</b>	<b>Ag Non-Farm Services</b>	10891	137.1	8814	796	189	1092	81%	7%	2%	10%
0111	Wheat	121	1.1	91	21	5	4	75%	17%	4%	3%
0112	Rice	167	2.5	128	29	5	5	77%	17%	3%	3%
0115	Corn	105	0.9	65	21	3	16	62%	20%	3%	15%
0119	Cash grains, nec	380	3.6	242	99	21	18	64%	26%	6%	5%
0131	Cotton	8075	112.9	6007	1551	190	327	74%	19%	2%	4%
0133	Sugarcane and sugar beets	82	0.5	38	39	5	0	46%	48%	6%	0%
0134	Irish potatoes	904	9.8	609	210	31	54	67%	23%	3%	6%
0139	Field crops, except cash grains, ne	3314	30.7	2240	774	145	155	68%	23%	4%	5%
0161	Vegetables and melons	13856	122.7	9432	3463	400	561	68%	25%	3%	4%
0171	Berry crops	373	1.3	287	54	13	19	77%	14%	3%	5%
0172	Grapes	51613	312.6	31654	15829	2208	1922	61%	31%	4%	4%
0173	Tree nuts	9095	84.8	6201	1921	398	575	68%	21%	4%	6%
0174	Citrus fruits	3002	26.6	1849	959	99	95	62%	32%	3%	3%
0175	Deciduous tree fruits	17492	97.6	9326	6747	780	639	53%	39%	4%	4%
0179	Fruits and tree nuts, nec	6537	52.8	4062	1900	238	337	62%	29%	4%	5%
0181	Ornamental nursery products	7432	89.3	5454	1343	231	404	73%	18%	3%	5%
0182	Food crops grown under cover	316	3.3	211	74	10	21	67%	23%	3%	7%
0191	General farms, primarily crop	25162	205.6	15797	7547	945	873	63%	30%	4%	3%
0211	Beef cattle feedlots	588	8.7	431	91	29	37	73%	15%	5%	6%
0212	Beef cattle, except feedlots	2801	37.4	1933	522	83	263	69%	19%	3%	9%
0213	Hogs	182	3.3	130	30	4	18	71%	16%	2%	10%
0214	Sheep and goats	359	3.7	330	14	4	11	92%	4%	1%	3%
0219	General livestock, nec	11	0.1	9	1	0	1	82%	9%	0%	9%
0241	Dairy farms	15687	260	13349	1390	247	701	85%	9%	2%	4%
0251	Broiler, fryer, and roaster chicken	5650	94.3	3922	1153	128	447	69%	20%	2%	8%
0252	Chicken eggs	686	12	562	70	16	38	82%	10%	2%	6%
0253	Turkeys and turkey eggs	6648	135	5504	490	123	531	83%	7%	2%	8%

**Table 3B: San Joaquin Valley Primary Jobs Analysis, 2001**

2001											
SIC	Industry Title	Primary or max earnings job in this SIC	Total Earnings in This SIC \$ Million	Only job in this SIC	At least 2 Ag Ers	At least 2 Ag Ers, plus 1 Non-Ag	1 Ag Er, plus 1 Non-Ag Er	Ag Only as % of Prim Jobs	2nd Ag % of Prim	2nd Ag 1 non-ag % of Prim	1 Ag plus 1 non-ag % of prim
0254	Poultry hatcheries	144	1.2	107	32	2	3	74%	22%	1%	2%
0259	Poultry and eggs, nec	454	4.8	384	32	10	28	85%	7%	2%	6%
0271	Fur-bearing animals and rabbits	8	0.1	5	1	0	2	63%	13%	0%	25%
0272	Horses and other equines	90	1	78	7	2	3	87%	8%	2%	3%
0273	Animal aquaculture	72	0.8	51	7	3	11	71%	10%	4%	15%
0279	Animal specialties, nec	444	5.2	377	33	3	31	85%	7%	1%	7%
0291	General farms, primarily animal	752	11.1	489	191	26	46	65%	25%	3%	6%
0711	Soil preparation services	972	15.4	704	150	23	95	72%	15%	2%	10%
0721	Crop planting and protecting	6392	81.1	4109	1748	178	357	64%	27%	3%	6%
0722	Crop harvesting	4414	42.6	2965	977	156	316	67%	22%	4%	7%
0723	Crop preparation services for marke	36797	373.4	24016	8797	1377	2607	65%	24%	4%	7%
0724	Cotton ginning	1749	24.4	1052	463	71	163	60%	26%	4%	9%
0741	Veterinary services for livestock	224	5.7	200	9	1	14	89%	4%	0%	6%
0742	Veterinary services, specialties	2145	33.1	1875	32	7	231	87%	1%	0%	11%
0751	Livestock services, exc. veterinary	445	7.4	370	36	8	31	83%	8%	2%	7%
0752	Animal specialty services	704	7.6	569	66	6	63	81%	9%	1%	9%
0761	Farm labor contractors	178798	529.2	131988	35607	5446	5757	74%	20%	3%	3%
0762	Farm management services	10420	76.9	7645	2233	317	225	73%	21%	3%	2%
0781	Landscape counseling and planning	289	3.1	205	53	9	22	71%	18%	3%	8%
0782	Lawn and garden services	6018	65.8	4741	492	124	661	79%	8%	2%	11%
0783	Ornamental shrub and tree services	1066	14.4	854	108	34	70	80%	10%	3%	7%

**Table 3C: Central Coast Primary Jobs Analysis, 1991**

1991											
SIC	Industry Title	Primary or max earnings job in this SIC	Total Earnings in This SIC \$ Million	Only job in this SIC	At least 2 Ag Ers	At least 2 Ag Ers, plus 1 Non-Ag	1 Ag Er, plus 1 Non-Ag Er	Ag Only as % of Prim Jobs	2nd Ag % of Prim	2nd Ag 1 non-ag % of Prim	1 Ag plus 1 non-ag % of prim
<b>01, 02, 07</b>	<b>Agriculture</b>	129903	1392.8	103631	17067	2113	7092	80%	13%	2%	5%
01	Agricultural Production--Crops	65708	700.7	53165	8407	1133	3003	81%	13%	2%	5%
02	Agricultural Production--Livestock	1623	25.6	1387	76	19	141	85%	5%	1%	9%
07	Agricultural Services	62468	666	48996	8571	956	3945	78%	14%	2%	6%
011	Cash Grains	296	2.4	277	11	0	8	94%	4%	0%	3%
013	Oil And Gas Extraction	414	5	258	127	13	16	62%	31%	3%	4%
016	Vegetables and Melons	21616	248.1	17309	3283	334	690	80%	15%	2%	3%
017	Fruits and Tree Nuts	23482	159.5	19158	2786	435	1103	82%	12%	2%	5%
018	Horticultural Specialties	13431	237.9	11547	741	148	995	86%	6%	1%	7%
019	General Farms, Primarily Crop	6469	47.8	4616	1459	203	191	71%	23%	3%	3%
021	Livestock, Except Dairy And Poultry	727	9.7	606	42	10	69	83%	6%	1%	9%
024	Dairy Farms	181	2.9	157	12	1	11	87%	7%	1%	6%
025	Poultry and Eggs	365	7.1	316	15	5	29	87%	4%	1%	8%
027	Animal Specialties	261	4.8	225	5	2	29	86%	2%	1%	11%
029	General Farms, Primarily Animal	89	1.1	83	2	1	3	93%	2%	1%	3%
<b>071, 072, 076</b>	<b>Ag Farm Services</b>	43980	367.9	33351	8257	870	1502	76%	19%	2%	3%
<b>074, 075, 078</b>	<b>Ag Non-Farm Services</b>	18488	298.1	15645	314	86	2443	85%	2%	0%	13%
0111	Wheat	18	0.1	18	0	0	0	100%	0%	0%	0%
0112	Rice	80	0.5	78	1	0	1	98%	1%	0%	1%
0115	Corn	69	1.2	64	1	0	4	93%	1%	0%	6%
0119	Cash grains, nec	129	0.6	117	9	0	3	91%	7%	0%	2%
0131	Cotton	237	2.7	119	104	10	4	50%	44%	4%	2%
0133	Sugarcane and sugar beets	38	1	34	1	0	3	89%	3%	0%	8%
0139	Field crops, except cash grains, ne	139	1.3	105	22	3	9	76%	16%	2%	6%
0161	Vegetables and melons	21616	248.1	17309	3283	334	690	80%	15%	2%	3%
0171	Berry crops	16416	120.8	13411	1958	300	747	82%	12%	2%	5%
0172	Grapes	1964	16	1695	176	16	77	86%	9%	1%	4%
0173	Tree nuts	888	5.6	762	75	14	37	86%	8%	2%	4%
0174	Citrus fruits	194	1.5	188	3	0	3	97%	2%	0%	2%
0175	Deciduous tree fruits	3320	12.1	2588	446	80	206	78%	13%	2%	6%
0179	Fruits and tree nuts, nec	700	3.5	514	128	25	33	73%	18%	4%	5%
0181	Ornamental nursery products	10754	177.8	9180	608	129	837	85%	6%	1%	8%
0182	Food crops grown under cover	2677	60.1	2367	133	19	158	88%	5%	1%	6%
0191	General farms, primarily crop	6469	47.8	4616	1459	203	191	71%	23%	3%	3%
0211	Beef cattle feedlots	91	1.2	70	10	2	9	77%	11%	2%	10%
0212	Beef cattle, except feedlots	589	8.2	491	31	8	59	83%	5%	1%	10%
0214	Sheep and goats	7	0.1	7	0	0	0	100%	0%	0%	0%
0219	General livestock, nec	40	0.2	38	1	0	1	95%	3%	0%	3%
0241	Dairy farms	181	2.9	157	12	1	11	87%	7%	1%	6%
0251	Broiler, fryer, and roaster chicken	15	0.5	11	1	0	3	73%	7%	0%	20%
0252	Chicken eggs	133	2.3	112	4	2	15	84%	3%	2%	11%
0253	Turkeys and turkey eggs	151	3.6	141	4	2	4	93%	3%	1%	3%
0254	Poultry hatcheries	30	0.5	23	3	0	4	77%	10%	0%	13%
0259	Poultry and eggs, nec	36	0.2	29	3	1	3	81%	8%	3%	8%
0271	Fur-bearing animals and rabbits	5	0.1	5	0	0	0	100%	0%	0%	0%

**Table 3C: Central Coast Primary Jobs Analysis, 1991**

1991											
SIC	Industry Title	Primary or max earnings job in this SIC	Total Earnings in This SIC \$ Million	Only job in this SIC	At least 2 Ag Ers	At least 2 Ag Ers, plus 1 Non-Ag	1 Ag Er, plus 1 Non-Ag Er	Ag Only as % of Prim Jobs	2nd Ag % of Prim	2nd Ag 1 non-ag % of Prim	1 Ag plus 1 non-ag % of prim
0272	Horses and other equines	110	1.3	97	4	2	7	88%	4%	2%	6%
0273	Animal aquaculture	24	0.6	21	0	0	3	88%	0%	0%	13%
0279	Animal specialties, nec	122	2.8	102	1	0	19	84%	1%	0%	16%
0291	General farms, primarily animal	89	1.1	83	2	1	3	93%	2%	1%	3%
0711	Soil preparation services	185	7.2	160	9	1	15	86%	5%	1%	8%
0721	Crop planting and protecting	545	9.5	388	99	8	50	71%	18%	1%	9%
0722	Crop harvesting	6568	51.8	4524	1738	136	170	69%	26%	2%	3%
0723	Crop preparation services for marke	15650	190.6	12293	2286	313	758	79%	15%	2%	5%
0741	Veterinary services for livestock	22	0.7	17	2	0	3	77%	9%	0%	14%
0742	Veterinary services, specialties	3830	71.5	3281	24	10	515	86%	1%	0%	13%
0751	Livestock services, exc. veterinary	14	0.2	11	0	0	3	79%	0%	0%	21%
0752	Animal specialty services	1233	12.4	1031	36	3	163	84%	3%	0%	13%
0761	Farm labor contractors	20131	94.4	15230	4004	408	489	76%	20%	2%	2%
0762	Farm management services	901	14.4	756	121	4	20	84%	13%	0%	2%
0781	Landscape counseling and planning	1199	21	996	40	13	150	83%	3%	1%	13%
0782	Lawn and garden services	10671	163.5	9009	177	56	1429	84%	2%	1%	13%
0783	Ornamental shrub and tree services	1519	28.8	1300	35	4	180	86%	2%	0%	12%

**Table 3C: Central Coast Primary Jobs Analysis, 1996**

1996											
SIC	Industry Title	Primary or max earnings job in this SIC	Total Earnings in This SIC \$ Million	Only job in this SIC	At least 2 Ag Ers	At least 2 Ag Ers, plus 1 Non-Ag	1 Ag Er, plus 1 Non-Ag Er	Ag Only as % of Prim Jobs	2nd Ag % of Prim	2nd Ag 1 non-ag % of Prim	1 Ag plus 1 non-ag % of prim
<b>01, 02, 07</b>	<b>Agriculture</b>	159076	1760	128524	17604	1998	10950	81%	11%	1%	7%
01	Agricultural Production--Crops	74493	803.8	61541	8032	980	3940	83%	11%	1%	5%
02	Agricultural Production--Livestock	1476	23.6	1234	67	17	158	84%	5%	1%	11%
07	Agricultural Services	83065	932	65723	9494	1000	6848	79%	11%	1%	8%
011	Cash Grains	141	1	126	3	2	10	89%	2%	1%	7%
013	Field Crops, except Cash Grains	260	3.4	208	20	1	31	80%	8%	0%	12%
016	Vegetables and Melons	27377	282	22170	4010	338	859	81%	15%	1%	3%
017	Fruits and Tree Nuts	23861	170.3	19398	2521	379	1563	81%	11%	2%	7%
018	Horticultural Specialties	17988	310.1	15953	621	161	1253	89%	3%	1%	7%
019	General Farms, Primarily Crop	4866	37	3686	857	99	224	76%	18%	2%	5%
021	Livestock, Except Dairy And Poultry	622	7.9	556	24	4	38	89%	4%	1%	6%
024	Dairy Farms	179	3.1	153	12	3	11	85%	7%	2%	6%
025	Poultry and Eggs	304	5.7	247	18	6	33	81%	6%	2%	11%
027	Animal Specialties	297	5.8	216	11	4	66	73%	4%	1%	22%
029	General Farms, Primarily Animal	74	1.1	62	2	0	10	84%	3%	0%	14%
<b>071, 072, 076</b>	<b>Ag Farm Services</b>	56232	474.9	44304	9087	815	2026	79%	16%	1%	4%
<b>074, 075, 078</b>	<b>Ag Non-Farm Services</b>	26833	457.1	21419	407	185	4822	80%	2%	1%	18%
0111	Wheat	6	0	4	0	0	2	67%	0%	0%	33%
0112	Rice	48	0.2	45	1	0	2	94%	2%	0%	4%
0115	Corn	31	0.1	31	0	0	0	100%	0%	0%	0%
0119	Cash grains, nec	56	0.7	46	2	2	6	82%	4%	4%	11%
0134	Irish potatoes	12	0.4	9	1	0	2	75%	8%	0%	17%
0139	Field crops, except cash grains, ne	248	3	199	19	1	29	80%	8%	0%	12%
0161	Vegetables and melons	27377	282	22170	4010	338	859	81%	15%	1%	3%
0171	Berry crops	18088	132.2	14662	1912	298	1216	81%	11%	2%	7%
0172	Grapes	1890	18.7	1657	108	11	114	88%	6%	1%	6%
0173	Tree nuts	546	3.9	491	31	6	18	90%	6%	1%	3%
0174	Citrus fruits	94	1.5	83	1	0	10	88%	1%	0%	11%
0175	Deciduous tree fruits	2795	10.8	2130	412	57	196	76%	15%	2%	7%
0179	Fruits and tree nuts, nec	448	3.2	375	57	7	9	84%	13%	2%	2%
0181	Ornamental nursery products	15562	247.9	13790	540	137	1095	89%	3%	1%	7%
0182	Food crops grown under cover	2426	62.2	2163	81	24	158	89%	3%	1%	7%
0191	General farms, primarily crop	4866	37	3686	857	99	224	76%	18%	2%	5%
0211	Beef cattle feedlots	65	0.6	57	3	3	2	88%	5%	5%	3%
0212	Beef cattle, except feedlots	524	7	472	21	1	30	90%	4%	0%	6%
0214	Sheep and goats	7	0	2	0	0	5	29%	0%	0%	71%
0219	General livestock, nec	26	0.3	25	0	0	1	96%	0%	0%	4%
0241	Dairy farms	179	3.1	153	12	3	11	85%	7%	2%	6%
0251	Broiler, fryer, and roaster chicken	23	0.3	18	2	0	3	78%	9%	0%	13%
0252	Chicken eggs	133	2.4	112	3	2	16	84%	2%	2%	12%
0253	Turkeys and turkey eggs	100	2.3	82	6	3	9	82%	6%	3%	9%
0254	Poultry hatcheries	14	0.3	12	0	0	2	86%	0%	0%	14%
0259	Poultry and eggs, nec	34	0.4	23	7	1	3	68%	21%	3%	9%
0271	Fur-bearing animals and rabbits	13	0.1	9	3	0	1	69%	23%	0%	8%
0272	Horses and other equines	82	1.3	60	2	1	19	73%	2%	1%	23%

**Table 3C: Central Coast Primary Jobs Analysis, 1996**

1996											
SIC	Industry Title	Primary or max earnings job in this SIC	Total Earnings in This SIC \$ Million	Only job in this SIC	At least 2 Ag Ers	At least 2 Ag Ers, plus 1 Non-Ag	1 Ag Er, plus 1 Non-Ag Er	Ag Only as % of Prim Jobs	2nd Ag % of Prim	2nd Ag 1 non-ag % of Prim	1 Ag plus 1 non-ag % of prim
0273	Animal aquaculture	45	0.9	32	5	2	6	71%	11%	4%	13%
0279	Animal specialties, nec	157	3.5	115	1	1	40	73%	1%	1%	25%
0291	General farms, primarily animal	74	1.1	62	2	0	10	84%	3%	0%	14%
0711	Soil preparation services	1642	17.1	1511	94	4	33	92%	6%	0%	2%
0721	Crop planting and protecting	992	7.5	829	117	8	38	84%	12%	1%	4%
0722	Crop harvesting	5801	55.1	4138	1336	131	196	71%	23%	2%	3%
0723	Crop preparation services for marke	14632	222.8	11743	1956	202	731	80%	13%	1%	5%
0741	Veterinary services for livestock	34	0.7	26	4	0	4	76%	12%	0%	12%
0742	Veterinary services, specialties	5028	86.6	4410	37	2	579	88%	1%	0%	12%
0751	Livestock services, exc. veterinary	30	0.6	26	1	1	2	87%	3%	3%	7%
0752	Animal specialty services	1040	11.2	865	26	8	141	83%	3%	1%	14%
0761	Farm labor contractors	32192	157.2	25426	5308	454	1004	79%	16%	1%	3%
0762	Farm management services	973	15.2	657	276	16	24	68%	28%	2%	2%
0781	Landscape counseling and planning	5954	134.1	4329	73	43	1509	73%	1%	1%	25%
0782	Lawn and garden services	13428	196.4	10625	243	125	2435	79%	2%	1%	18%
0783	Ornamental shrub and tree services	1319	27.5	1138	23	6	152	86%	2%	0%	12%

**Table 3C: Central Coast Primary Jobs Analysis, 2001**

2001											
SIC	Industry Title	Primary or max earnings job in this SIC	Total Earnings in This SIC \$ Million	Only job in this SIC	At least 2 Ag Ers	At least 2 Ag Ers, plus 1 Non-Ag	1 Ag Er, plus 1 Non-Ag Er	Ag Only as % of Prim Jobs	2nd Ag % of Prim	2nd Ag 1 non-ag % of Prim	1 Ag plus 1 non-ag % of prim
<b>01, 02, 07</b>	<b>Agriculture</b>	173418	1940.6	141785	18554	2554	10525	82%	11%	1%	6%
01	Agricultural Production--Crops	73263	882.6	60153	8223	1226	3661	82%	11%	2%	5%
02	Agricultural Production--Livestock	3516	49	3149	55	16	296	90%	2%	0%	8%
07	Agricultural Services	96044	1006.3	78157	10041	1284	6562	81%	10%	1%	7%
011	Cash Grains	134	1.1	123	2	2	7	92%	1%	1%	5%
013	Field Crops, except Cash Grains	429	4.4	368	20	6	35	86%	5%	1%	8%
016	Vegetables and Melons	28430	315.6	22906	3817	497	1210	81%	13%	2%	4%
017	Fruits and Tree Nuts	20655	172.1	16612	2644	388	1011	80%	13%	2%	5%
018	Horticultural Specialties	19479	355.5	17233	801	224	1221	88%	4%	1%	6%
019	General Farms, Primarily Crop	4136	33.9	2911	939	109	177	70%	23%	3%	4%
021	Livestock, Except Dairy And Poultry	2687	32.6	2462	35	7	183	92%	1%	0%	7%
024	Dairy Farms	136	2.6	115	8	3	10	85%	6%	2%	7%
025	Poultry and Eggs	276	5.2	228	5	5	38	83%	2%	2%	14%
027	Animal Specialties	355	7.7	289	5	1	60	81%	1%	0%	17%
029	General Farms, Primarily Animal	62	0.9	55	2	0	5	89%	3%	0%	8%
<b>071, 072, 076</b>	<b>Ag Farm Services</b>	62331	460.9	49547	9390	1071	2323	79%	15%	2%	4%
<b>074, 075, 078</b>	<b>Ag Non-Farm Services</b>	33713	545.4	28610	651	213	4239	85%	2%	1%	13%
0111	Wheat	15	0.1	11	1	1	2	73%	7%	7%	13%
0112	Rice	51	0.4	49	1	0	1	96%	2%	0%	2%
0115	Corn	35	0.1	35	0	0	0	100%	0%	0%	0%
0119	Cash grains, nec	33	0.5	28	0	1	4	85%	0%	3%	12%
0134	Irish potatoes	6	0	6	0	0	0	100%	0%	0%	0%
0139	Field crops, except cash grains, ne	423	4.4	362	20	6	35	86%	5%	1%	8%
0161	Vegetables and melons	28430	315.6	22906	3817	497	1210	81%	13%	2%	4%
0171	Berry crops	16467	130.3	13189	2208	325	745	80%	13%	2%	5%
0172	Grapes	1472	25.2	1290	56	6	120	88%	4%	0%	8%
0173	Tree nuts	321	3.8	276	25	5	15	86%	8%	2%	5%
0174	Citrus fruits	48	1.2	47	0	0	1	98%	0%	0%	2%
0175	Deciduous tree fruits	1170	5.5	908	131	32	99	78%	11%	3%	8%
0179	Fruits and tree nuts, nec	1177	6.1	902	224	20	31	77%	19%	2%	3%
0181	Ornamental nursery products	16754	298	14895	627	184	1048	89%	4%	1%	6%
0182	Food crops grown under cover	2725	57.5	2338	174	40	173	86%	6%	1%	6%
0191	General farms, primarily crop	4136	33.9	2911	939	109	177	70%	23%	3%	4%
0211	Beef cattle feedlots	52	0.5	42	5	1	4	81%	10%	2%	8%
0212	Beef cattle, except feedlots	458	7.2	404	18	2	34	88%	4%	0%	7%
0213	Hogs	1	0	1	0	0	0	100%	0%	0%	0%
0214	Sheep and goats	2157	24.7	1997	11	4	145	93%	1%	0%	7%
0219	General livestock, nec	19	0.2	18	1	0	0	95%	5%	0%	0%
0241	Dairy farms	136	2.6	115	8	3	10	85%	6%	2%	7%
0251	Broiler, fryer, and roaster chicken	29	0.6	23	1	0	5	79%	3%	0%	17%
0252	Chicken eggs	107	2	84	3	1	19	79%	3%	1%	18%
0253	Turkeys and turkey eggs	107	2	94	1	3	9	88%	1%	3%	8%
0254	Poultry hatcheries	16	0.3	13	0	0	3	81%	0%	0%	19%
0259	Poultry and eggs, nec	17	0.3	14	0	1	2	82%	0%	6%	12%
0271	Fur-bearing animals and rabbits	5	0	5	0	0	0	100%	0%	0%	0%
0272	Horses and other equines	84	0.9	66	3	0	15	79%	4%	0%	18%
0273	Animal aquaculture	12	0.3	9	0	0	3	75%	0%	0%	25%

**Table 3C: Central Coast Primary Jobs Analysis, 2001**

2001											
SIC	Industry Title	Primary or max earnings job in this SIC	Total Earnings in This SIC \$ Million	Only job in this SIC	At least 2 Ag Ers	At least 2 Ag Ers, plus 1 Non-Ag	1 Ag Er, plus 1 Non-Ag Er	Ag Only as % of Prim Jobs	2nd Ag % of Prim	2nd Ag 1 non-ag % of Prim	1 Ag plus 1 non-ag % of prim
0279	Animal specialties, nec	254	6.5	209	2	1	42	82%	1%	0%	17%
0291	General farms, primarily animal	62	0.9	55	2	0	5	89%	3%	0%	8%
0711	Soil preparation services	1222	15.5	1094	81	7	40	90%	7%	1%	3%
0721	Crop planting and protecting	1285	11.8	849	336	28	72	66%	26%	2%	6%
0722	Crop harvesting	4413	31.2	2823	1380	111	99	64%	31%	3%	2%
0723	Crop preparation services for marke	11771	181.1	9277	1650	232	612	79%	14%	2%	5%
0741	Veterinary services for livestock	66	0.9	55	3	2	6	83%	5%	3%	9%
0742	Veterinary services, specialties	5307	108.7	4595	53	16	643	87%	1%	0%	12%
0751	Livestock services, exc. veterinary	45	0.6	42	1	0	2	93%	2%	0%	4%
0752	Animal specialty services	1599	17.1	1324	28	10	237	83%	2%	1%	15%
0761	Farm labor contractors	42090	198.3	34259	5719	673	1439	81%	14%	2%	3%
0762	Farm management services	1550	23	1245	224	20	61	80%	14%	1%	4%
0781	Landscape counseling and planning	3855	55.6	3347	143	35	330	87%	4%	1%	9%
0782	Lawn and garden services	20906	328.5	17598	384	141	2783	84%	2%	1%	13%
0783	Ornamental shrub and tree services	1935	34	1649	39	9	238	85%	2%	0%	12%